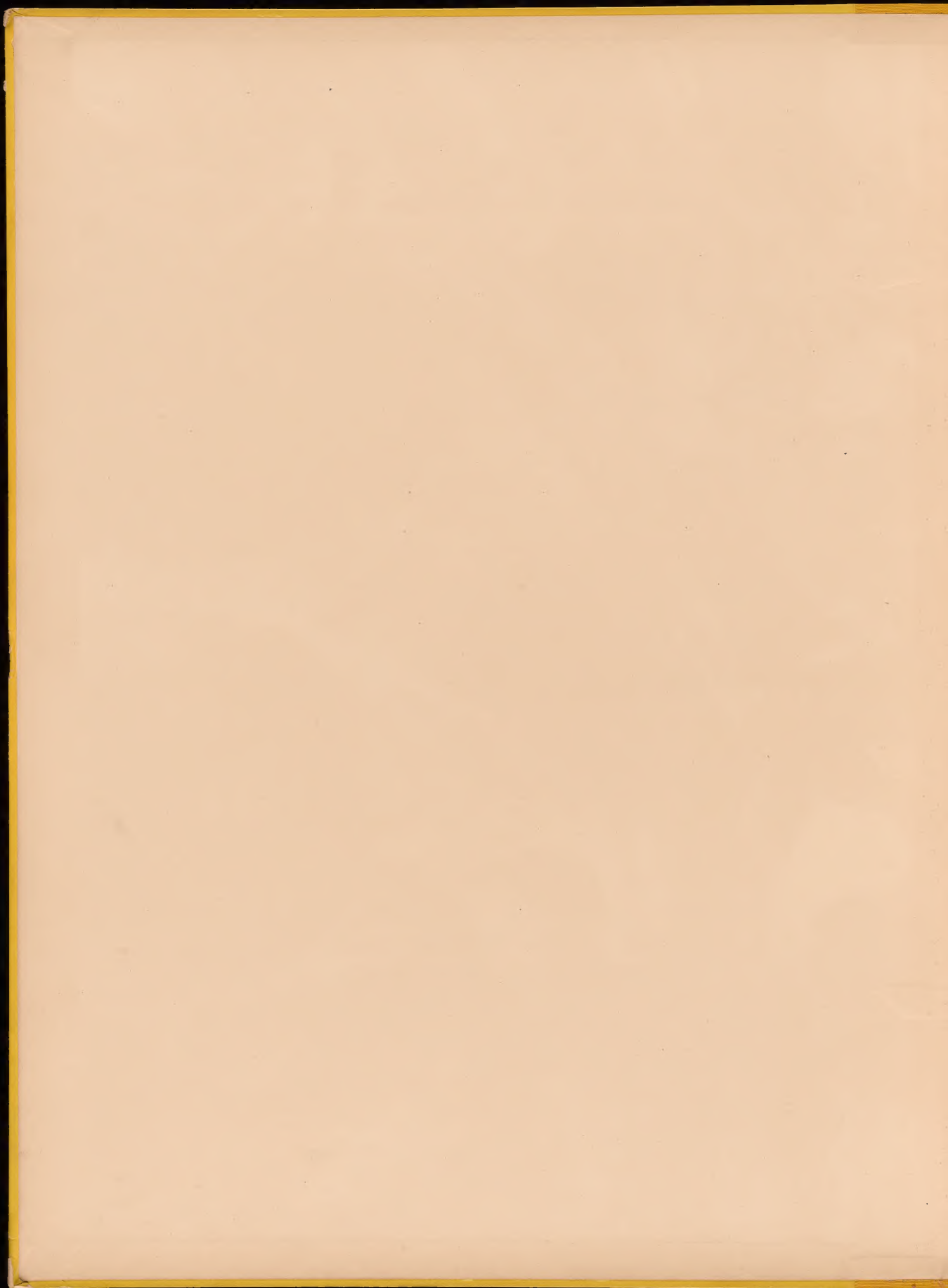
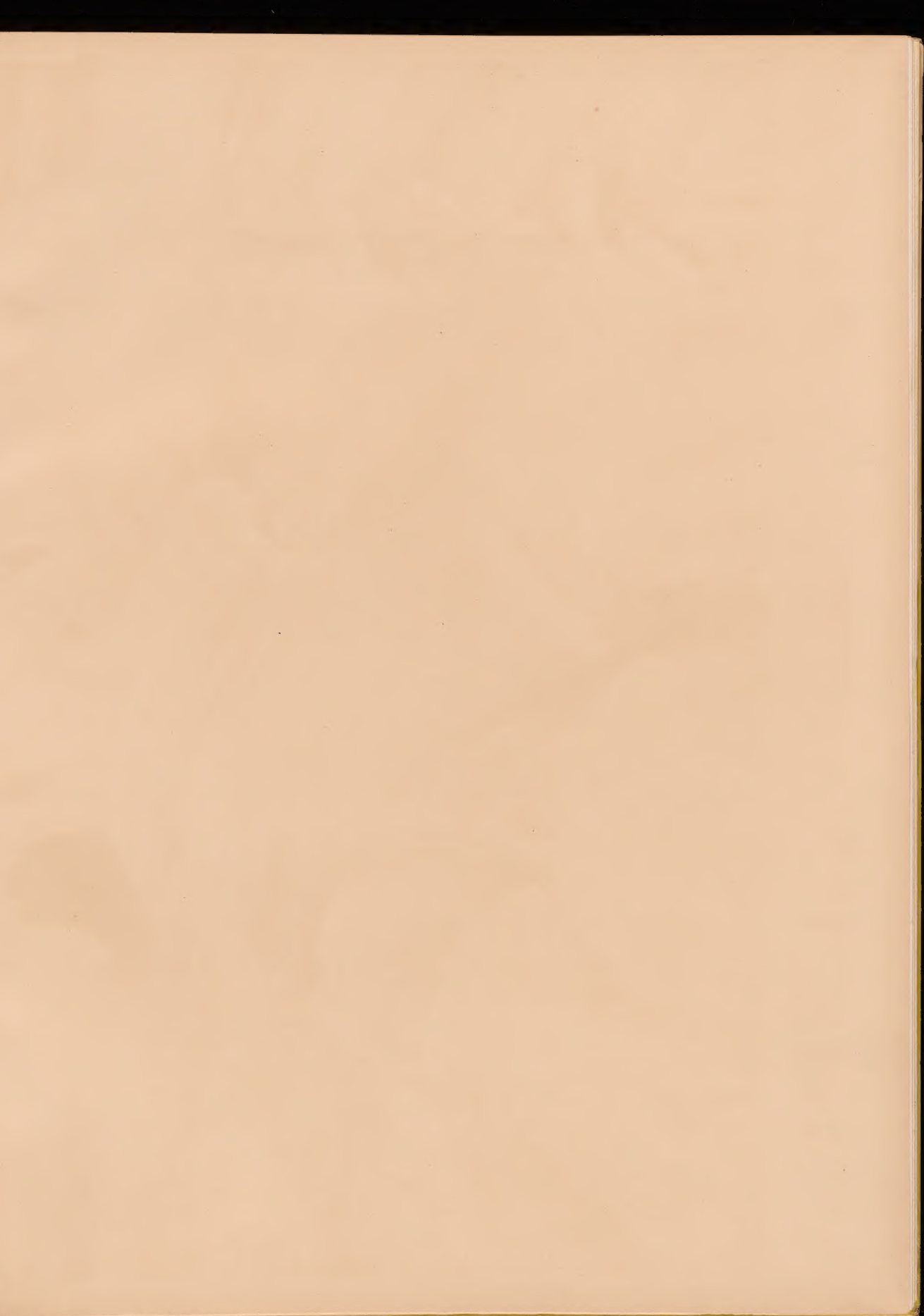


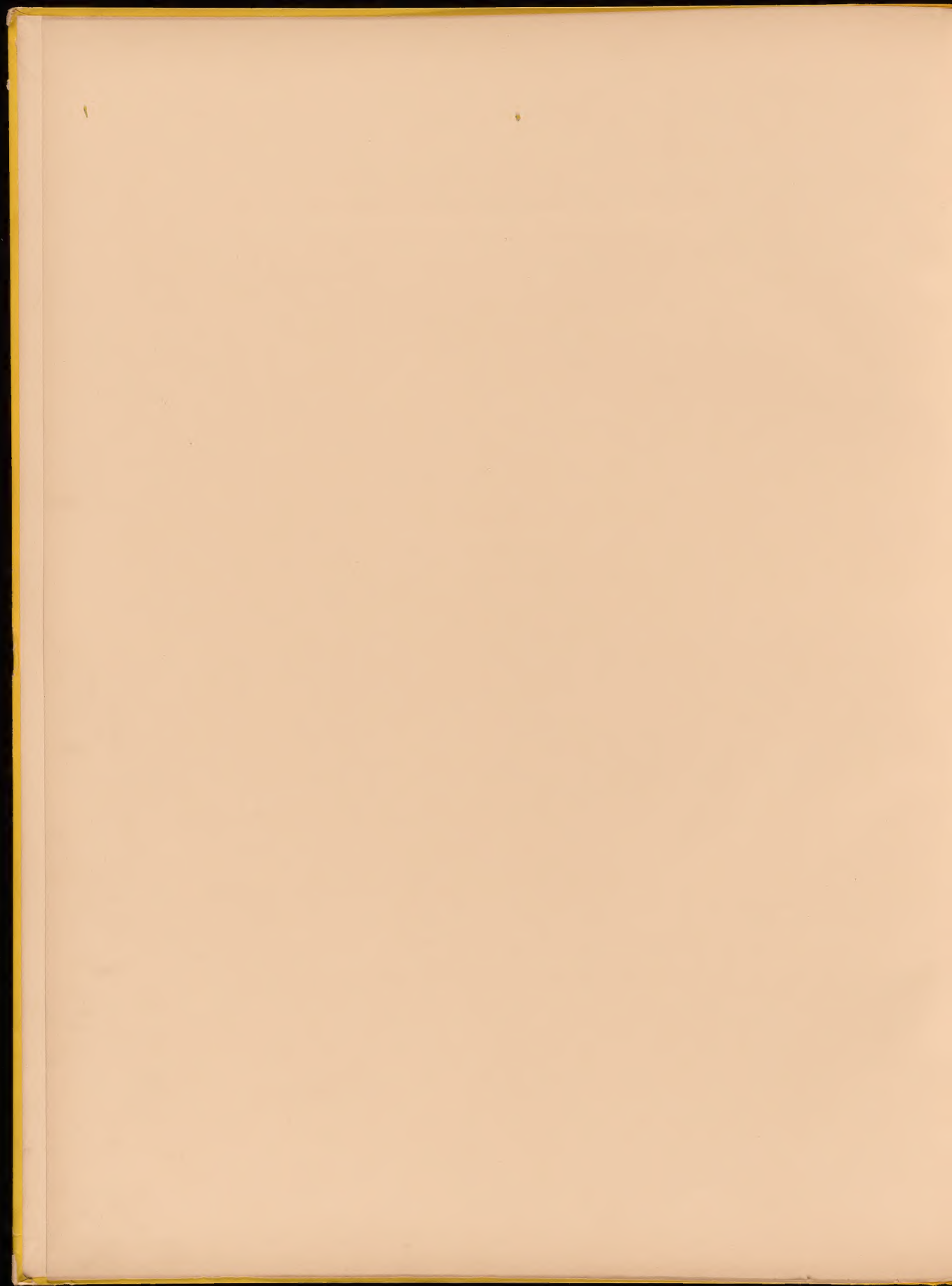
# ORIENTAL CERAMIC ART



· COLLECTION OF · W · T · WALTERS · SECTION · FIVE ·





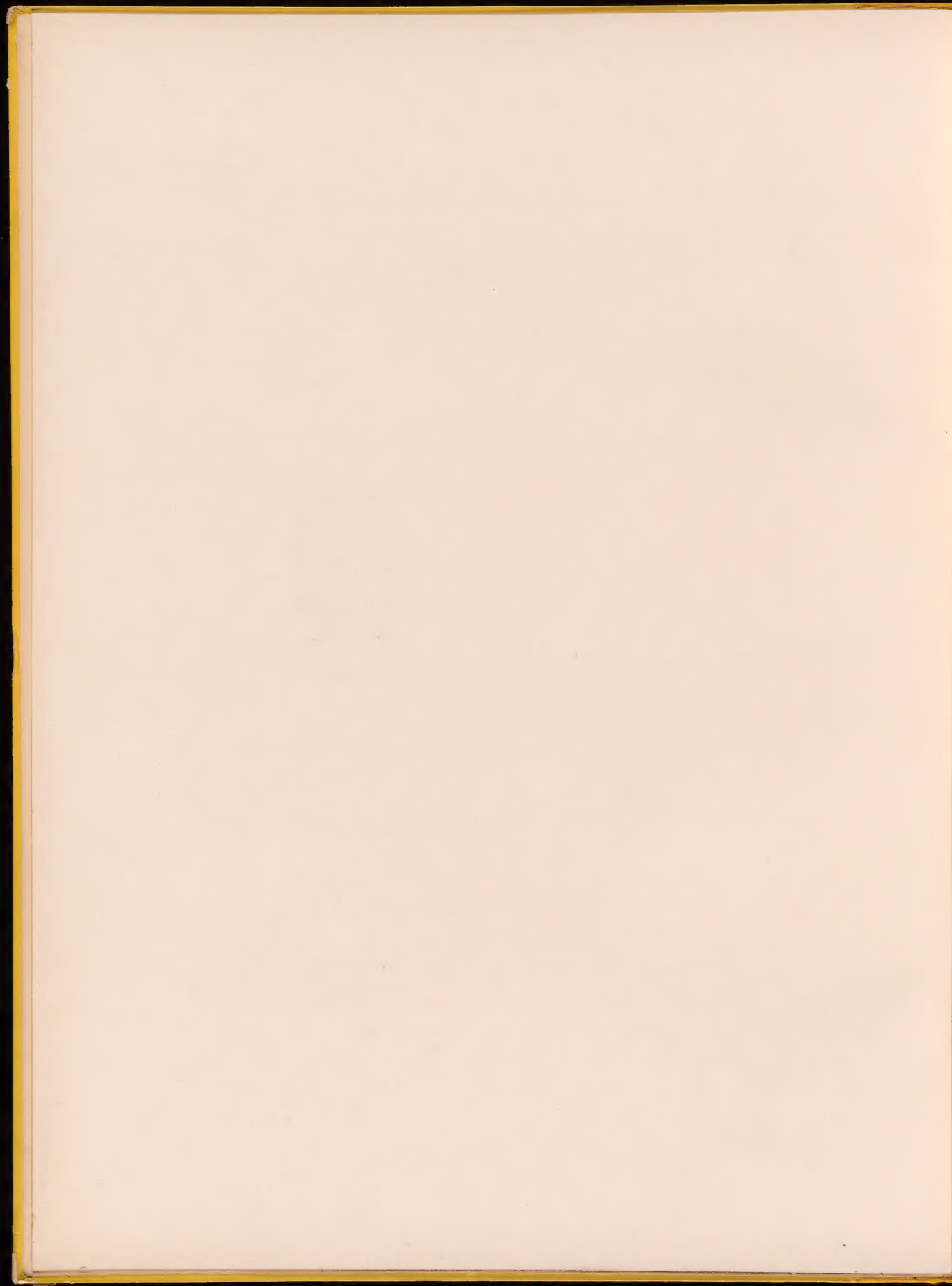


ORIENTAL CERAMIC ART

COLLECTION OF  
W. T. WALTERS

EDITION LIMITED TO FIVE HUNDRED COPIES

*SECTION FIVE*



tendents of the imperial potteries, were afterward given to the *T'sang Yao*, *Nien Yao*, and *T'ang Yao*, names which the respective productions of their times retain to this day.

The Lang Yao *par excellence* is characterized by a rich, deep glaze of crackled texture imbued with the crimson mottled clouds of blood-red tone, which have earned for it the name of *sang-de-bœuf*, by which it is generally known. The color is not uniform, but flashes in streaks of varied shade produced by the action of the furnace flames on the copper silicate to which the color is due. It is more homogeneous, however, than the *flambé* reds of later times which, in common parlance, share with it the name of *sang-de-bœuf*. Sometimes a quite modern piece of *chi hung*, or "sacrificial red," so-called because, like the Lang Yao itself, it was made after the color of the ancient sacrificial cups of the reign of *Hsüan-té*, will appear accidentally, as it were, clothed in a rich garb rivaling in intensity that of the finest Lang Yao vase. An intentional imitation, although it may approach in brilliancy of tone the rich coloring of the original, always fails in some point of technical detail. The color requires perfect fluidity of the enamel to bring it out in perfection—a condition which the modern potter can not attain without the glaze "running," so that it becomes very thin on the upper rim, which often appears nearly white, and runs down to collect in thick drops round the foot, which has to be subsequently ground down on the wheel. All attempts to reproduce this beautiful color in the West have also failed, principally, it is said, because it is so difficult to seize the exact moment, a few seconds more or less in the duration of the firing being sufficient to ruin the beauty of the fugitive tint.

The principal means of distinguishing the veritable Lang Yao consists in the perfect potting of the piece, evidenced by the mathematical regularity of the white line of enamel which often defines the rim and the condition of the foot, as well as in the tone of coloring in the crackled glaze. The condition of the foot is always a special criterion to the Chinese connoisseur, who looks especially at the paste when it is left unglazed round the circular rim, to distinguish the productions of different periods. The bottoms of these vases are described as exhibiting glazes of three kinds, having *ping-kuo ti*, "bases of apple-green (crackle)," *mi-sê ti*, "bases of rice-colored (crackle)," or *pai-tz'ü ti*, "bases of plain white porcelain."

If the piece be entirely green, it is a specimen of *Lü Lang Yao*, or "Green Lang Yao." This is always crackled; it is of a uniform apple-green (*ping-kuo ch'ing*) shade, paler than that of the brilliant green monochromes which distinguish the later part of the reign; the rims are defined by a line of translucent white enamel, and the technique is that of the ordinary Lang Yao; the rare pieces that I have seen are small in size. The color has been called a copper celadon, but it is better, I think, to restrict the term celadon to the sea-green tint produced by a protoxide of iron.

In addition to the magnificent vases and censers of *sang-de-bœuf*, we have a variety of miscellaneous articles, intended for domestic use, such as saucer-shaped dishes, basins, bowls, tazzas, shaped cups, and the like, and occasionally we even find a round box of the type adapted to hold seal-vermilion, or a small snuff-bottle, representing the class. The glaze, always crackled, varies from an intense blood-red, through intermediate shades of paler hue, till it becomes sometimes almost pink; in other cases it darkens into a dull maroon, or a liver-colored tint. The bowls are of solid make, heavy-footed, expanding at the mouth to a thin, spreading rim, which is defined by a white line. There is a series of bowls of the same shape as the red bowls, which are decorated generally with birds and flowers, painted in the brilliant enamel colors of the early K'ang-hsi period, which are considered by the Chinese to be productions of the same kilns, and which are also classified by them under the heading of Lang Yao. These bowls are



FIG. 206.—Vase of powder blue ground, with a floral decoration in gold.

characterized by a deeply cracked glaze of pale greenish tone which is traversed by red lines, and on the surface of this crackle the enamel decoration, boldly designed, is laid on with a free brush, so that the colors, especially the cobalt-blue, stand out in prominent relief. These bowls would be classed under the heading of "Green Lang Yao," decorated with enamels.

To return to the annals of the province. In the tenth year of *K'ang-hsi* (1671) the governor was ordered to supply the ritual sets of sacrificial vessels required by the emperor in the worship of the different temples at Peking. He dispatched officials from Jao-chou and Fou-liang to Ching-tê-chên to superintend the work and see that it was executed in accordance with the imperial decree. The sacrificial vessels required were all fabricated and successfully fired, the necessary funds being provided on a liberal scale, so that neither money nor materials were levied from the people, and the things were sent on in successive batches to the capital, as soon as they were finished, as required by the decree.

But troubles supervened in connection with the rebellion of Wu San-kuei, the viceroy of Yunnan, who threw off his allegiance to the Manchu emperor in 1674, and headed the last expiring efforts of the native Chinese against the rule of the Tartars. The imperial factory at Ching-tê-chên was burned to the ground in the following year. The death of Wu San-kuei, which occurred in 1678, was followed in a few months by a final triumph of the imperial forces, and the province of Kiangsi was soon afterward pacified. In the ninth month of the nineteenth year (1680) an imperial decree was issued ordering the production of a quantity of imperial porcelain for the use of the palace, and at the same time a board of commissioners was selected from the officials of the Nei Wu Fu, or "Imperial Household," and directed to proceed to Ching-tê-chên to superintend the work. The first commission was composed of Hsü T'ing-pi, secretary (*Lang-chung*) of the Treasury of the Privy Purse, and Li Yen-li, an assistant secretary. The second commission, appointed two years later, was headed by Ts'ang Ying-hsüan, secretary of the Imperial Parks Department of the Board of Works, who is stated to have arrived at Ching-tê-chên in the second month of the twenty-second year (1683), and who at once took over the superintendence of the imperial manufactory. We are not told how long he remained in charge. After his time the work was carried on by the provincial officials, as there seems to have been no appointment of another imperial commission till the next reign.

To Ts'ang Ying-hsüan is due the brilliant renaissance of the ceramic art in China which distinguishes the reign of *K'ang-hsi*. Tang Ying, who ultimately succeeded to the office, in his *Life of the God of the Furnace Blast*, bears testimony to his genius when he writes: "When Ts'ang was director of the porcelain works the finger of the god was often seen in the midst of the furnace fire, either painting the designs or shielding them from harm, so that the porcelain came out perfect and beautiful." The writer of the *Ching-tê-chên T'ao-lu* says, in his description of the Ts'ang Yao, that the porcelain made by him was of fine rich material and thin translucent texture, that all the different

colors were produced, and that among them the four most beautiful colors were the snake-skin green with iridescent hues, the eel-skin yellow of brownish shade, the turquoise-blue, and the variegated yellow, although the monochrome yellow, the monochrome purple, and the monochrome green glazes, as well as the *soufflé* red and the *soufflé* blue, were all remarkably fine. He adds that all these different glazes were copied afterward by Tang Ying. We may add that the peculiar brilliancy of these well-known *K'ang-hsi* colors is inimitable.

The porcelain was still called by the old name of *Kuan Yao*, or "imperial ware," to distinguish it from the productions of the private potters. Among the things sent to the palace, according to the official list, were fish-bowls (*kang*), flower-pots (*p'ên*), basins (*yü*), round dishes (*p'an*), beaker-shaped vases (*tsum*), censers (*lu*), vases (*p'ing*), jars with covers (*kuan*), saucer-



FIG. 207.—Vase with molded floral decoration painted in blue and maroon relieved by a crackled *lang-de-houf* ground of brilliant tone.

plates (*tieli*), bowls (*wan*), teacups and wine-cups (*chung, chan*). The decorative designs used included fabulous dragons enveloped in clouds, birds, and four-footed beasts, fishes swimming in water green with moss, and flowering plants of all kinds. The porcelain was either painted in colors, or chiseled in relief, or faintly engraved under the glaze, or carved in open-work: all these different processes are declared to have been cleverly executed in the imperial workshops at this period.

Another famous glaze appeared in this reign which challenges the supreme position generally accorded by lovers of the ceramic art to the Lang Yao *sang-de-bœuf*. I refer, of course, to the "peach-bloom" (*peau-de-pêché*), also called sometimes "crushed strawberry" (*fraise écrasée*), which is another example of the decorative power of the same protean color, being due to a fortuitous mingling of the silicates of copper. Although not so intense and brilliant as the *sang-de-bœuf*, it has a special charm of its own in its soft, velvety tones, which remind one of the coloring of the rind of a peach ripening in the sun. The prevailing shade is a pale red, becoming pink in some parts, in others mottled with russet spots, displayed upon a background of light-green celadon tint. The last color occasionally comes out more prominently and deepens into clouds of bright apple-green tint. The varied shades of color are well represented in the illustrations, as will be appreciated by reference to Plates III, LI (a), LII, and L. The vases illustrated here are all marked in full, underneath, with the "six-character mark" of the reign, beautifully written in a minute script, which is penciled under the glaze in cobalt-blue.

The Chinese prize the subdued beauty of this glaze above all others for the decoration of their writing-tables, and most of the objects originally adapted for this purpose are of comparatively small size. They call it by the special name of *ping-kuo hung*, or "apple-red," and they distinguish also the accessory *ping-kuo ch'ing*, or "apple-green" clouds, and the *met-kuei tsu*, or "rose-crimson" mottled spots. This comparison with the mingled red and green shades of a rosy-cheeked apple is apt enough, especially as the same idea is often brought out in the form of the object; two favorite designs, for example, of the little water-bottles intended to be used with the writer's pallet are the *ping-kuo tsun*, or "apple-jar," which is molded as an exact facsimile in size and shape of the fruit, and its fellow, the *shih-liu tsun*, or "pomegranate-jar"; I have seen these two shapes only in China. Another native name for this "peach-bloom" glaze, which is the one that is commonly used by the Chinese dealer, is *chiang-tou hung*. This might be rendered "haricot-red," the *chiang-tou* being a small kidney-shaped bean of variegated pink color with brown spots, largely cultivated at Peking and other parts of China, the *Dolichos sinensis* of botanists.

Among the other specimens of the peach-bloom class in the collection are (Fig. 188) a small water receptacle for the writing-table modeled in the traditional form of the wine-jar of Li T'ai-po, the famous poet of the eighth century, from which it derives its name of *T'ai-po tsun*; and Fig. 198, a circular box for the vermilion used for impressing seals, another indispensable adjunct of the writing-table of the Chinese scholar. Fig. 202 shows a vase similar in form to the one illustrated in Plate LII, which has been mounted in Japan. Fig. 201 is a pilgrim bottle with a copper-red glaze of "peach-bloom" type, which differs from the rest in being unmarked.

There is one class of these vases in which the base of the neck is encircled by the form of



FIG. 208.—K'ang-hsi Vase, decorated in enamel colors interrupted by powder blue medallions penciled in gold.

an archaic dragon, modeled in full under-cut relief, which is enameled with a bright apple-green glaze of uniform tint, contrasting vividly, as a complementary color, with the red shades of the vase. Fig. 209 exhibits one of these dragon-encircled bottles which has the usual mark inscribed on the foot underneath.

The last piece to be noticed here is a little bowl-shaped wine-cup of egg-shell texture invested, inside and out, with a "peach-bloom" glaze displaying all the typical tints (Fig. 210). The mark underneath is that of the reign of *Hsüan-tê* of the *Ming* dynasty, but the perfection of the technique and the character of the glaze indicate the *K'ang-hsi* period, and the mark would perhaps be intended to show that the aim of the potter was the reproduction of one of the celebrated "sacrificial red wine-cups" of the older reign, which, we know, were tinted with the same coloring material.



FIG. 209.—Peach-bloom Vase, with a dragon molded in salient relief on the shoulder, enameled bright apple-green; mark, *K'ang-hsi*.

The first "peach-bloom" vases that reached the United States seem to have come from Peking, out of the famous collection of the hereditary Princes of *Yi*,\* the source also, by the way, of the sixteenth century album that has been so often referred to. The founder of this line of princes was the thirteenth son of the Emperor *K'ang-hsi*. *T'ang Ying* refers to him (*Chiang hsi f'ung chih*, book xciii, folio 10) as having, in the eighth month of the year 1723, personally announced to him by command of his brother, the Emperor *Yung-chêng*, his own (*T'ang Ying*'s) appointment to be director of the imperial potteries, and we may gather from this that the prince was interested in the development of the ceramic art. After his death the hereditary rank of imperial prince (*Ch'in Wang*) was conferred upon his descendants, a unique honor, as it is the rule in China for each generation to descend one step in the scale of nobility till they become commoners.

His descendant in the fifth generation was the notorious *Yi Ch'in Wang*, to whom the empress-regent sent a silken cord in 1861, so that he might expiate by his suicide his mismanagement of the Anglo-French war. A young scion of his house was chosen at the same time to succeed him, instead of one of his own sons, as an additional punishment, and it is he who is currently reported since he grew up to have taken to dissipated ways, and to have wasted the valuable collections of his ancestral palace. It may be of some interest to see traced back, in this way, to a son of the Emperor *K'ang-hsi*, a collection that was no doubt formed in his reign, the gems of which excited such interest in ceramic circles on their first appearance, and which will always rank as triumphs of decorative art.

The vases, though small in size, are generally of fine technique and graceful form. They share these characteristics with some others of similar make and shape enameled with different glazes, which are often marked in the same style, and evidently belong to the same period. Perhaps the most beautiful of the monochrome glazes of this class is the *yueh p'ai*, or *clair-de-lune*, of uniformly pale sky-blue tint, which is illustrated in Plate LI (b), but the soft, celadon shades displayed in the illustration (Plate VII), which is modeled in the graceful lines of one of the finest of the "peach-bloom" vases, are almost as charming. Two other vases are given in Plate L, under the heading of Peach-Bloom Transmutations, one of which is a pearl gray of pinkish hue, with traces of mottled red lurking inside the neck, while the other is marbled with variegated splashes of green, passing from emerald to



FIG. 210.—Wine Cup of eggshell texture, covered inside and out with mottled peach-bloom glaze of typical coloring; mark, *Hsüan-tê*.

\* In the *Catalogue of the Art Collection formed by the late Mrs. Mary J. Morgan, New York, 1886*, it is noted that several of the "peach-blow or crushed-strawberry vases" came "from the private collection of *I Wang-ye*, a Mandarin prince," which must be the one I refer to. *Wang Yeh* is "Prince" in colloquial Pekingese, and *Yi* is sometimes written *I*.

PLATE XLV.

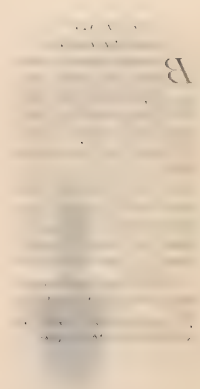
TURQUOISE BEAKER.

**B**RAKER-SHAPED VASE  
(Hua Ku), of slender, graceful form, with slightly spreading foot and trumpet-shaped mouth, modeled after an ancient bronze design on lines similar to those of the vase figured in Plate XLIV, but differing from it in having a perfectly plain surface.

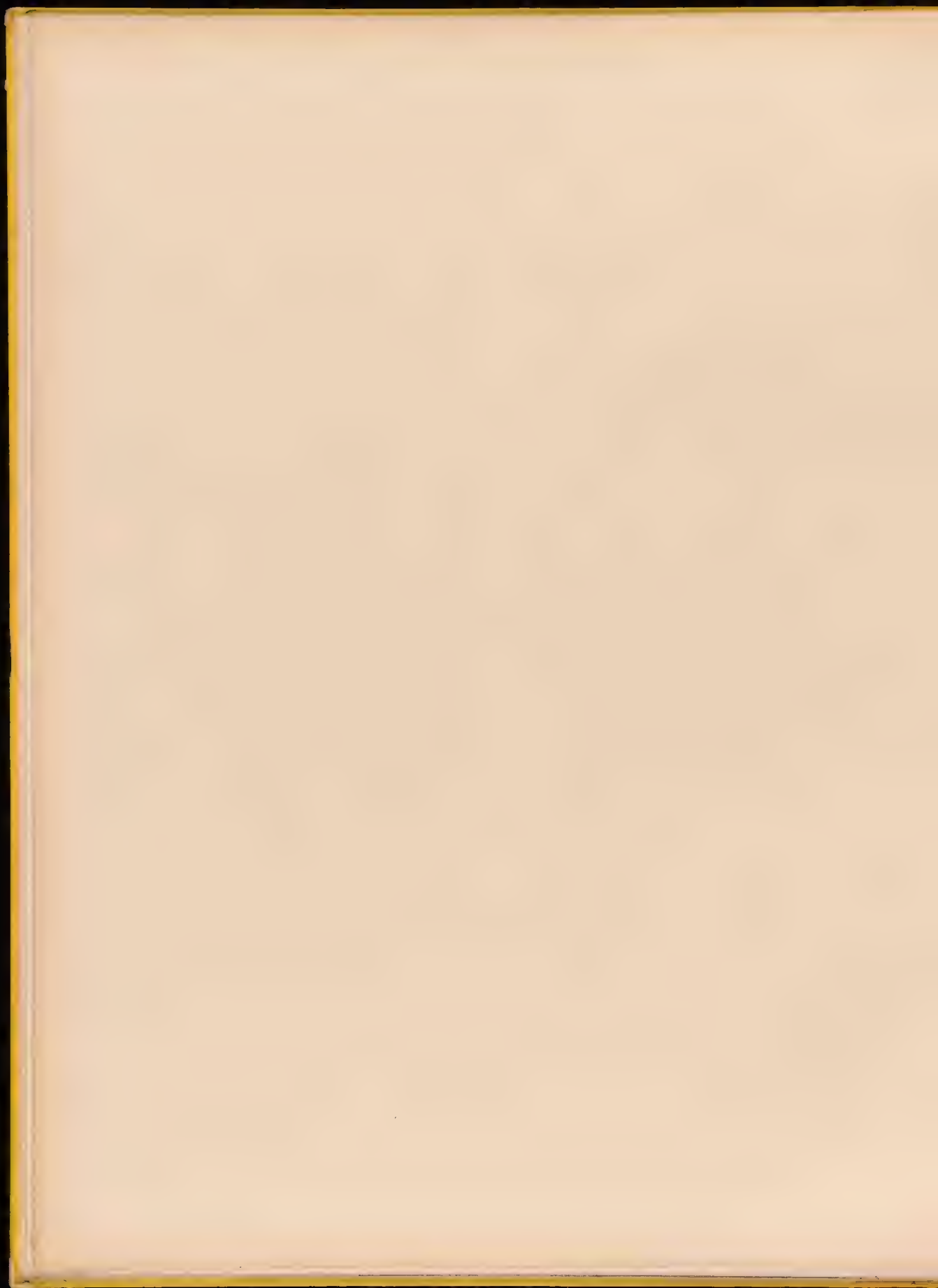
It is enamelled with the same finely crackled glaze of mottled tones of the purest turquoise tint, which extends over the rim inside the mouth, and invests the base of the foot, with the exception of the circular rim, which is unglazed, and shows the grayish texture of the paste.

It must be referred to the same period, the reign of Ch'ien-lung (1736-95). It is a pale bluish variety of the glaze which Chinese ceramists call k'ung-ch'ue-lo, or "peacock-green."









intense olive tones, a striking instance of the kiln transmuted green (*yu lü*), which we shall meet with presently in Chapter XVIII.

These two glazes, the *sang-de-boeuf* and the *peau-de-pêche*, were not employed exclusively as single colors; they were used also in combination with other forms of decoration, and some of the most brilliant blue pieces of the period are occasionally seen with the painted designs relieved by one of these colors in place of the ordinary white ground. A remarkable example is seen in the vase illustrated in Fig. 207, the ground of which is a typical "Lang Yao" crackled glaze, exhibiting all the different *sang-de-boeuf* tones, passing from paler shades into deepest crimson. The neck and shoulder of the vase are ribbed, and the decoration is modeled in relief in the paste, and filled in with underglaze cobalt-blue, with touches of copper-red. It consists of a flowering lotus springing from a groundwork of crested waves, and a pair of swallows, one of them perched on a lotus stalk, the other flying. The large, naturally folded lotus leaves, lifted upon rough tuberculated stems, and the birds, are painted in blue; the flowers and buds are shaded in addition, in wavy lines of maroon tint within the blue outlines. The foot, which is enameled white with a tinge of green, has no mark inscribed.

The rare baluster-shaped vase in Fig. 211, which is engraved in the paste with a lightly etched design of a pair of dragons mounting into the clouds from a line of scrolled sea-waves, and is enameled with a brilliant crackled glaze of bright green passing into olive at the edges, is invested with a thick over-glaze of "peach-bloom" type, collecting in mottled clouds of "crushed-strawberry" tint, laid on so thickly that the forms of the dragons are scarcely visible in the interstices of the clouds. The foot, encircled by a broad, unglazed rim, has concentric lines of grayish-white crackle in the middle, with no mark attached.

The "iron-red," prepared by the incineration of green vitriol (iron sulphate), called also "coral-red" from the tone of color, which is quite distinct from that of the "copper-reds" which we have been considering, is found among the single colors of this time, although much less frequently than in succeeding reigns. In the reign of K'ang-hsi this color was employed more largely in painted decoration: either alone, as in the egg-shell bowl in Plate LXVII; or in combination with gold, as in the club-shaped vase in Plate XXVIII; or as one of the different colors comprised in the ordinary polychrome decoration of the muffle oven.

The brilliant blues derived from cobalt were brought out with vivid intensity in this reign, which is unrivaled for its monochrome blues, as well as for the beauty of its blue and white decorated porcelain. The calcined cobaltiferous ore of manganese was either mixed with the white glaze to produce the gray-blue illustrated in Plate LXXIV, or it was blown through gauze upon the raw white body of the piece and subsequently glazed over to produce the magnificent effect of powder blue, so well represented by the artist in Plate XCIII. This "powder-blue," also called "Mazarin-blue," or sometimes *bleu fouetté*, from its whipped aspect, may be either left as the sole decoration of the vase, or it may be painted over with ornamental designs in gold, fixed by a second firing in the muffle stove. The vase in Fig. 206, which is decorated in gold with sprays of chrysanthemum and bamboo, is an example of the last style of decoration. In other cases, again, the powder-blue ground is interrupted by medallions of varied form, which are filled with designs, either executed at the same time in blue, or painted after the first firing in enamel colors; an example of a decorated powder-blue vase is illustrated in Plate XVIII. A decorated vase, on the other hand, may have powder-blue panels interrupting the main decoration, as in the interesting vase in Fig. 208, which deserves a word of description. It is painted in brilliant enamel colors with gilding, the body with chrysanthemum scrolls traversed by lizard-like dragons, the neck with butterflies and flowers on a pale-green background dotted with black, with flying storks, and phoenix medallions; the shoulder has a band of floral brocade with pictures in foliated panels, and the upright rim of the mouth is encircled by a green border with



FIG. 211.—Crackled Baluster Vase, with lightly incised decoration invested with a brilliantly mottled glaze of peach-bloom type.

a black fret; the twelve panels, fan-shaped, quatrefoil, oblong, or in the form of a leaf or pomegranate, which interrupt the painted decoration, are filled in with a powder-blue *soufflé* ground, outlined in gold, and painted over in gold with landscapes, Taoist temples, flying geese, fighting cocks, sprays of flowers, etc.

Another monochrome glaze invented at this period was the brilliant black called *vu chin*, or "metallic black," by the Chinese, which is sometimes called "mirror black," after Père d'Entrecolles, who compared it to the color of our burning mirrors. It differs from the black of the painted vases, which is of duller aspect, and often of greenish tone, and gives more the impression of being a lacquered surface. It is prepared by mixing some of the calcined cobaltiferous manganese ore with the ordinary white glaze and adding a certain proportion of the ferruginous *fond laque*, or coffee-colored glaze. The mirror-black glaze is usually though this often becomes almost ob- tall vase shown in Plate LXXX, and shaped vases illustrated in Plate LXI vase illustrated in Plate LXII exhib- iridescent surface, which distin- orated pieces of the time.

The brown glaze just referred the French potteries as *fond laque*, from a dark bronze hue to the color authors by many names, such as *lait*, etc.; the Chinese name of gold," is as characteristic as any, prefixing *hung*, "red," or *huang*, dominance of either of these two was rarely used alone; it was or other ornamental designs, face enamel colors, as in the two beaker-shaped vases illus- combination is the most com- in huge quantities in Dutch to old inventories which have Jacquemart and others, and old trade name of "Bata- of this class, with the bulg- brown, and the neck decorated pinks, bands of fret, and floral neath with a double ring, a *hsi* period. Fig. 215 presents the "brown-gold" ground that body is succeeded by an en- the shoulder, as well as the

in blue with flowers and butterflies; it has no mark underneath, but evidently belongs to the same period as the last. Another mode of decoration was effected by overlaying the brown glaze with designs in white slip; a bottle-shaped vase of this kind is seen in Fig. 216, displaying in its somewhat crude decoration two vases of flowers and a conventional beaded border executed in slip; it is an example of a class of vases decorated by the Chinese in Persian style for export to that country; a similar one, indeed, is erroneously figured by Jacquemart under the heading of Persian porcelain. Père d'Entrecolles tells us that designs were also painted at this time in metallic silver on the surface of this brown glaze, and that the combination was pretty and effective. I have never seen a specimen,

to, which is known technically in may be noticed next. It ranges of old gold, and is known to ceramic "chocolate," "dead leaf," "*café au tsü-chin*," which means "burnished and they distinguish the shade by "yellow," according to the pre- colors in the brown. This glaze usually interrupted by medallions

which were decorated in sur- garniture of three jars and trated in Fig. 213. The last mon of all; it was imported ships of the time, according been recently published by the decoration still retains its vian." Fig. 214 shows a vase ing body enameled yellowish in blue, with formal sprays of diaper, which is marked under- favorite mark of the *K'ang-* a vase of similar style, in which invests the lower half of the circling band of crackle, and beaker-shaped neck, is painted



FIG. 215.—Tall Triple Gourd of the K'ang hsi period, with a white center, decorated in colors between mirror-black segments with underglaze re- liefs. Companion in Plate LXI

PLATE XLVI

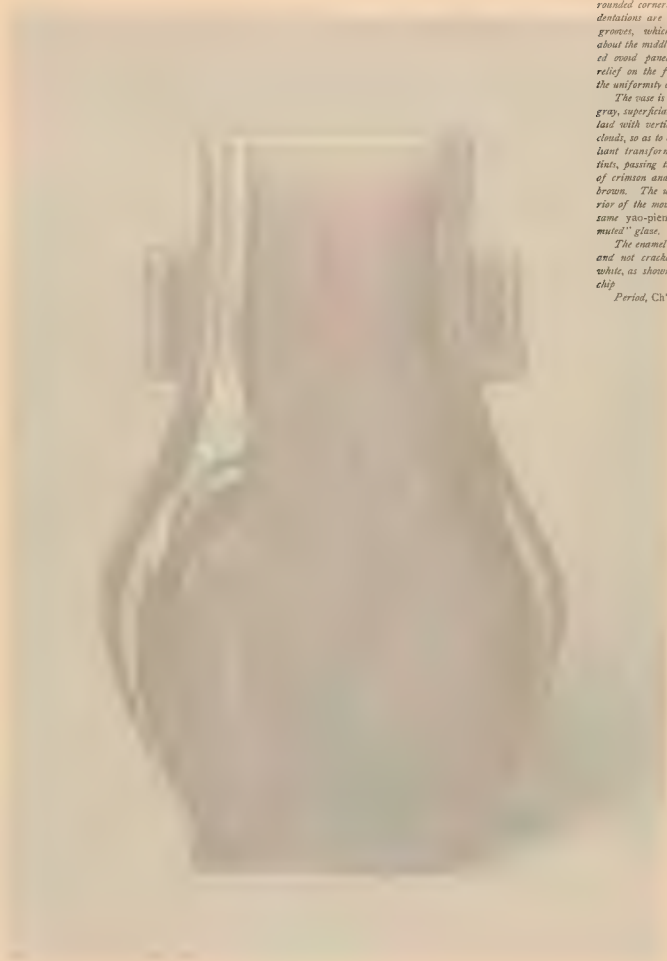
BRILLIANT FLAMBE VASE

**Q**UADRANGULAR VASE  
(Fang Tsun), 12 inches high,  
of antique design, with two wide  
opposite handles projecting from the  
sides of the neck. The mouth has the  
rounded corners indented, and the in-  
dentations are continued downward as  
grooves, which gradually disappear  
about the middle of the vase. A point-  
ed oval panel is outlined in slight  
relief on the front and back, to break  
the uniformity of the surface.

The vase is enameled outside with a  
gray, superficially crackled glaze, over-  
laid with vertical streaks and mottled  
clouds, so as to exhibit splashes of bril-  
liant transformation colors of varied  
tints, passing through brilliant shades  
of crimson and purple into deep olive-  
brown. The upper rim and the inter-  
ior of the mouth are coated with the  
same yao-pien, or "furnace trans-  
muted" glaze.

The enamel under the foot is yellow  
and not crackled; the paste is very  
white, as shown by a slight accidental  
chip.

Period, Ch'ien-lung (1736-95)



2







perhaps on account of the fugitive nature of the silver decoration, which is easily tarnished and rubbed off by wear.

The "turquoise-blue" and "aubergine-purple" are two colors, dating from previous times, which may be bracketed together, as they offer several analogies, and are, moreover, often used in combination in the decoration of the same piece. The glazes are applied *sur biscuit*, and have a finely crackled or *truite* texture. The turquoise glaze called *Kung-chiao lü*, or "peacock-green," by the modern Chinese, although it is also known in books as *fei-h'ui*, from its resemblance to the blue plumes of the kingfisher, which are used in jewelry, is prepared by combining copper with a nitre flux. The *ch'ieh pi tsü*, or "aubergine-purple," is derived from the common ore of manganese and cobalt, calcined and mixed like the last with nitre and pulverized quartz. The Walters Collection is very rich in turquoise crackle of different periods, including,



FIG. 213.—Garniture of Three Jars and Two Beakers, with reserve panels, decorated in colors, relieved by a coffee-brown ground

as it does, considerably over a hundred pieces, some magnificent specimens of which, with bronze mounts by Gouthière, and which are attributed to the reign of K'ang-hsi, have already been figured. It is frequently seen on Buddhist images, lions, and other monsters, *magots*, and grotesques of all kinds, such as those which were so eagerly sought after by collectors of the eighteenth century. Aubergine-purple, as a single color, occurs principally on small vases. The two glazes used together make a very effective combination, as in the large lions mounted upon square pedestals, which rank among the chief ornaments of the Dresden Museum. The colors in these pieces are boldly laid on with a free brush and with no attempt at symmetry; in some cases the purple is flecked with a brush in a rain of drops upon the turquoise ground; in others the paste is worked in relief for the reception of the colors which enhance the outlines previously tooled in the paste. The wine-pot shown in Fig. 217 is an illustration of this last method, which dates from very ancient times; it is composed of grayish paste molded in the shape of a peach, with a hole in the bottom for the introduction of a liquid, and has the spout and handle fashioned in the form of twigs from which leaves proceed to decorate the surface of the pot, upon which they are worked in relief and filled in with turquoise, contrasting brightly with the surrounding purple enamel. These colors are said to develop better when there is a mixture of

common clay with the ordinary hard kaolinic ingredients of the plate, which is seen to be the case in this small wine-pot.

The same manganese mineral was used in the preparation of the purplish brown, which was one of the three single colors used for enameling the bowls, cups, and saucer-dishes of the imperial dinner services, on which it takes a brownish claret tint, due to an excess of lead in the flux and a minimum of alkali. The other two colors were a bright green of camellia-leaf tint, and deep yellow, the special imperial color, and the services were either plain or etched with dragons under the glaze. The services of similar style, enameled in pure white (*fi'en pai*) over five-clawed dragons engraved in the paste, were used only when the court was in mourning.



FIG. 214.—K'ang-hsi Vase with the upper part painted in blue and white, the body of a monochrome buff.

The imperial yellow color is exhibited in Plate V upon a jar with a "six-character mark" of this reign. The "eel-skin yellow," or *shan yü luang*, which is of brownish tint, is seen in Plate LXXXIII upon a vase etched underneath the glaze with dragons; and again in Plate XXV upon a tripod censer, a still more typical example, where it is of less translucent aspect, and mottled in character. The variegated yellow glaze (*huang tien pau*), which has been alluded to as another of the inventions of Ts'ang Ying-hsüan, seems to refer to the peculiar spotted glaze of piebald aspect

dabbed all over with spots of yellow, green, purple, and white, which is anything but attractive to an ordinary eye; the Chinese call it by the appropriate name of "tiger-skin" (*hu-p'i*).

The green glazes, which are specially characteristic of the reign, are displayed in all their variety in the colored illustrations, ranging from the *ta lü* or *gros vert* of Plate IV to the pale gray-green celadon tint of Plate XV. Green is almost as prominent among the single colors as it is in the painted decorations in enamel. The same enamels were, of course, used in both the monochrome and the polychrome styles, and comparison often affords a most useful aid to the determination of the age of a doubtful piece. The crackled green glaze called *kua-pi lü*, or "cucumber-green," is more characteristic of the *Ch'ien-lung* epoch, although the striking vase shown in Plate LXXXI, with its "cucumber-green" glaze streaked with mottled tints of deepest olive, may well be a *K'ang-hsi* piece, judging from



FIG. 216.—Bottle shaped Vase decorated in white slip lac upon a dark brown chocolate-colored ground.

its exceptional brilliancy. The remarkable vase which is so carefully reproduced in Plate LXXIX, with the iridescent bar reflected in a play of rainbow colors from its crackled emerald-green surface, is also generally attributed to this period. One of the green glazes was known in the imperial factory by the name of *shé-pi lü*, because it resembled in its deep luster the beautiful iridescent hue of the skin of a serpent, like the monochrome glaze in Plate LXXXII, which is spread over the surface of a decorated vase, so as nearly to conceal the original decoration in its intense metallic luster. The same green was occasionally used to enhance the effect of a blue and white piece, touches of green or encircling bands being added

to the original design, in the same way that bands of "dead leaf" or "old gold" were sometimes attached at this period; an example of which may be seen by referring to the chapter on Marks.



FIG. 215.—K'ang-hsi Vase, decorated in bands of buff monochrome, gray crackle and blue and white

illustrated in Plate XC, which is attributed to the *K'ang-hsi* reign, in spite of its *Sung* dynasty mark. It is even surpassed in purity and lustrous depth of glaze by the charming little vase shown in Fig. 218, which is molded in the form of a magnolia blossom, with the details etched under the glaze, the graceful flower being mounted upon a twig worked in open-work relief at the foot, and which bears also a couple of buds, that serve as additional support to the delicate vase. This white is distinct from that of the porcelain of the province of Fuchien, which is either of ivory-white or of creamy tint; the objects, moreover, of the Fuchien ware are composed of a paste of characteristic quality, and should have a separate corner reserved for them in every collection.

There is another class of plain white porcelain, modeled on the lines of the ancient Ting-chou ware, which is remarkable for its soft-looking, fragile aspect, in which it reproduces the quality of its prototype, a white *faïence* of fine texture, that can be scratched by a point of sharp steel. The reproductions have only the aspect of soft porcelain, however, although it is the fashion to describe them as such in catalogues; there is nothing produced at Ching-tê-chên that is not composed of hard kaolinic paste. The class I am alluding to is called by the name of



FIG. 218.—White Flower-Vase, of charming design and perfect technique, simulating a magnolia blossom, with two buds rising from the same stalk.

*Fên-Ting*, after that of the finest ware of the *Sung* dynasty; the glaze is generally crackled, although plain pieces occur, like the delicate little water receptacle in Fig. 219, which is fashioned after an old Ting-chou design with two looped handles, in the shape of a pair of archaic dragons, mounted upon the rim. Of the reproductions of the crackled Ting-chou porcelain, there are two varieties generally attributed to the reign of *K'ang-hsi*. The first is represented by a series of small, solid, compact vases of graceful outline, of which two specimens are illustrated in Figs. 220 and 221; the soft-looking glaze, with which these are invested, is traversed by a very close reticulation of fine, brown lines, and mottled with clouds of light buff tint; the rims of both vases are defined by lines of plain white, and the technique generally is that of the early *K'ang-hsi* period. The second variety, of later development, is characterized by a more delicate fabric, often becoming of egg-shell thinness, and by a whiter glaze, approaching an ivory-white tone. Two notable examples are shown in the colored illustrations: the first, in the sparsely crackled vase of Plate XCI; the second, in the typical *Fên-Ting* gourd, of perfect beauty and finish, which is so well reproduced in Plate LXXXIX. This last, ornamented with floral sprays and bands of fret and conventional scroll, worked in slight relief in the paste, underneath the minutely crackled glaze, which is of characteristic ivory-white tint. Fig. 222 displays another graceful egg-shell vase, with a molded decoration of a four-clawed dragon pursuing an effulgent jewel, executed under a widely crackled ivory-white glaze, with undulatory surface. Fig. 223 is that of a small, minutely crackled square vase, with ribbed corners and four central bosses, carved in open-work, with branches of peach fruit, which is modeled in the ritual form of one of the receptacles for "divining straws," used in Taoist temples.

The fabrication of this peculiar *Fên-Ting* porcelain was continued at Ching-tê-chên in the succeeding reigns of *Yung-chêng* and *Chien-lung*, and it is not always easy to refer a particular piece positively to one of the three reigns. The same paste and glaze were used con-



FIG. 217.—Wine-pot of gray biscuit, worked in relief, filled in with glazes of turquoise blue and aubergine purple.



FIG. 219.—White uncrackled *Fên-Ting* Waterpot of egg-shell texture, with dragon handles.

temporarily in the preparation of the class of blue and white cracked porcelain, which is called by the same name of *Fên-Ting* by the Chinese, and which forms the so-called "soft paste" blue and white of American collectors.

The "soft paste" blue and white porcelain is called by the Chinese by the names of *sha-t'ai*, "sand-bodied," or *chiang-t'ai*, "paste-bodied," and when the glaze is crackled it is distinguished by the addition of the term *k'ai p'ien*, or "crackled." Its composition will be given from Père d'Entrecolles' Letters in the next chapter. The paste has a



FIG. 220.—Bottle with crackled glaze shot with mottled clouds of buff color

soft, porous aspect, but it is really of intense hardness, so that it can not be scratched by steel. The glaze is generally crackled; even when it is not so as it comes from the kiln, it becomes crackled in course of time. The surface of the glaze is undulatory and often pitted, the characteristics of the *chü-p'i*, or "orange-peel" glaze of Chinese ceramic authors. It is consequently more porous and absorbent than the ordinary glaze, and often becomes discolored by age. It has been suggested that "soft glaze" would be a better name than "soft paste"

for this class, but the latter term is sanctioned by usage and may be employed with the proviso that it has nothing in common with the "soft porcelain" of Chelsea, or the *porcelaine tendre* of early Sèvres. One of the chief

characteristics of these pieces is their lightness when handled, which is really surprising, as the fabric is not specially thin. The blue is usually of a grayish tone, and the strokes of the brush are very neatly and clearly defined, so that the picture looks, as Père d'Entrecolles remarks, as if it were painted upon vellum instead of on ordinary paper. The pieces are rarely marked; if there be a date inscribed, it will be of *Hsüan-tê* (1426-1435) of the *Ming* is described to have been pale, of the blue in modern Japanese

There is a small specimen of trated in Plate LXVIII, a miniature the peculiar ivory-white color "jade"—not an infrequent mark typical example of the uncrackled exhibited in Fig. 224, which pre-thirteen inches high, of very light soft-toned blue, under the pitted with three formal upright sprays folded peltate leaf, a blossom, stems. Chains of rectangular fret complete the simple decoration, toned blue of pure tint. There is

Fig. 172 shows a choice specimen of glaze, with a minutely reticulated tint, over emblematic designs delicately sketched in soft blue. The five on the body, four on the balls tied with waving fillets, sup-and enveloped in flames. This *shih f'ung chü*—i. e., "A family of nine (sons) living together," a pun on the word *shih*, which means "family" as well as "lion." In the same way the five bats in the cloud scroll encircling the receding shoulder of the vase suggest the "five happinesses" (*wu fu*), and the band of prunus blossom round the

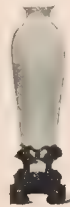


FIG. 221.—Finely Crackled Vase of clouded buff tint, with reticulation of brown lines.

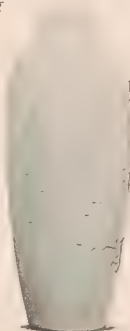


FIG. 222.—Ivory-white Fên-Ting Vase, of very delicate texture, with dragon molded in relief. The glaze, with undulatory surface, is sparsely crackled

Hirado porcelain. this crackled blue and white illustration teapot, which displays very of the glaze; it is marked *yü*, during the *K'ang-hsi* period. A "soft paste" blue and white is sent a baluster vase (*mei p'ing*), material, which is decorated in undulatory "orange-peel" glaze, of lotus, each composed of a and a bud, rising on separate encircling the base and shoulder which is neatly etched in a soft-no mark underneath

men of the crackled *Fên-Ting* undulating surface of ivory-white delicately sketched in soft blue. The five on the body, four on the balls tied with waving fillets, sup-and enveloped in flames. This *shih f'ung chü*—i. e., "A family of nine (sons) living together," a pun on the word *shih*, which means "family" as well as "lion." In the same way the five bats in the cloud scroll encircling the receding shoulder of the vase suggest the "five happinesses" (*wu fu*), and the band of prunus blossom round the

PLATE XLVIII

## PLAG : HPLG : PLLGLM

**L**UGU · PILGRIM BOT  
 TLE · CASE · Pansy  
 'ng, libally · full moon  
 10, in nches h gh, 15th fl. of  
 ration in enamel · doors of the Yung-  
 cheng period (1723-35)

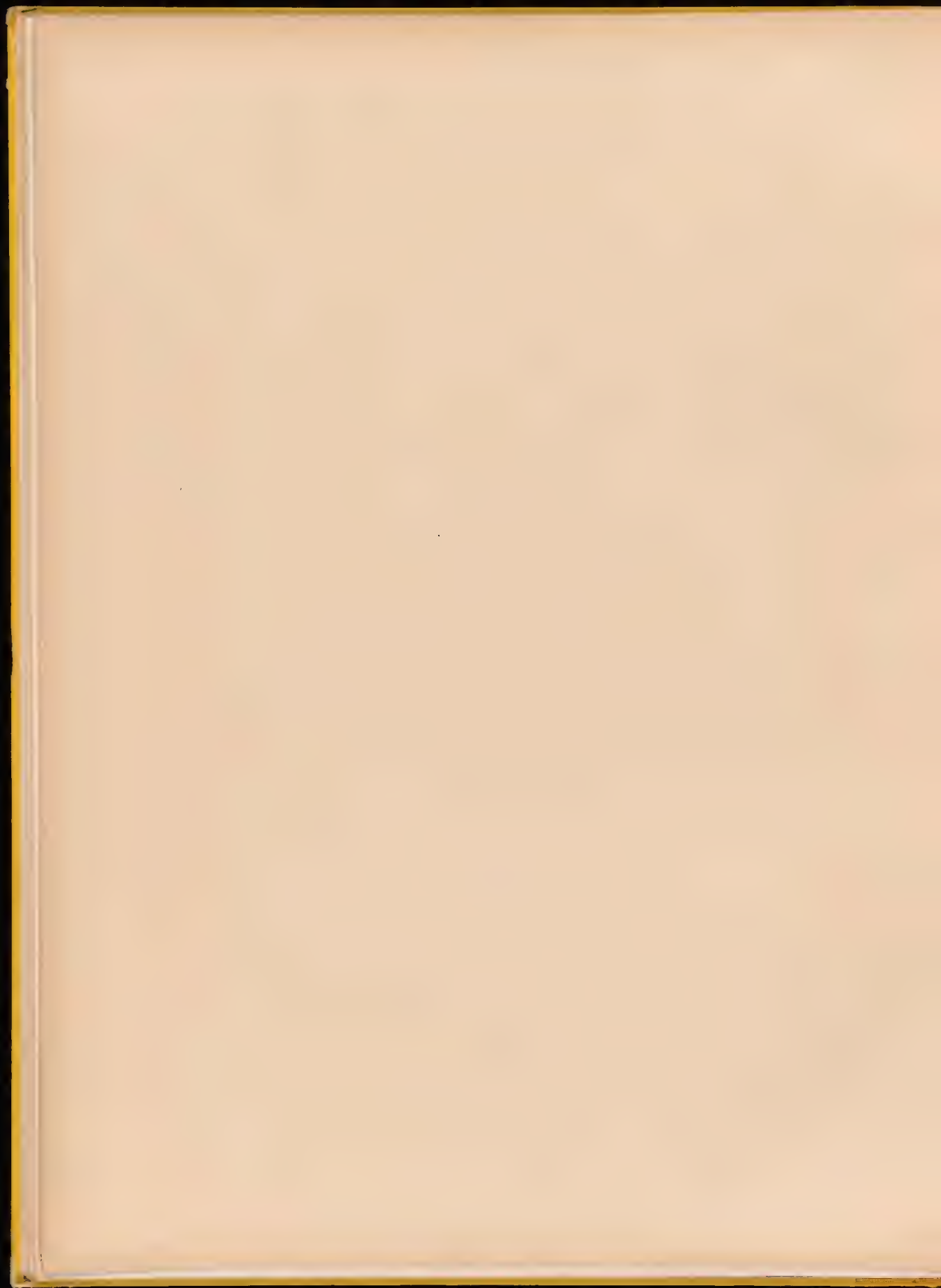
The neck is openwork, has a rather sweet, the neck and shoulders are fashioned in the form of a graceful arc. The base of the neck is encircled by a band of jet, succeeded above by a formal palmate ring of platinum, below by a scroll border, and a ring of scroll ornament surrounds the foot.

The body of the vase is accented by both sides with flowering branches springing from a point near the foot and spreading over the surface. On the side stands a tree of scarlet pomgranate flowers and branches of the white plum and pink *Prunus japonica*, mingled with twigs of bamboo and sacred fungus. On the other side scarlet flowers, with white petals 1/2 yellow, but in the middle spring from rocks, clad with fungus with bamboo sprigs, and there is a bunch of red mandarin berries rising above a pair of butterflies flying above the plum, and here are hovering round the plum blossoms.

The seal penciled underneath an underglaze blue is Ta ch'ng Yang ch'eng nien ch'ü 11, "Made in the reign of Yang ch'eng, of the Great Ch'ing [dynasty]."







foot a flourishing longevity. The foot has the same crackled glaze spread underneath, with no mark attached.

The beautiful little cup in Fig. 37 is a K'ang-hsi production of the same class. It is modeled in the form and style of the Hsüan-tê period, and is decorated in a similar underglaze blue with a pair of five-clawed dragons pursuing jewels among clouds and flames, on the sides, and with a second pair of dragons upon the rounded cover, which is surmounted by a mythological animal; there is no mark underneath.

Passing on to the ordinary blue and white (*ch'ing hua pai ti*—i. e., "painted in blue on a white ground"), the reign of K'ang-hsi is unquestionably the finest period, when the cobalt comes out in its full inimitable brilliancy from the depths of a rich translucent glaze. The white ground has often a slight bluish tint, but it is not so blue as it was in the Ming dynasty; in the succeeding reigns it becomes creamy, or is even almost opaque, so as to be chalky in aspect. The blue is not generally so full and strong as in the reign of Chia-ching of the Ming dynasty, but it is graded, so as to produce a charming modulation, and a palpitating quality of color, which we rarely find in earlier work, hardly ever in more recent times; it is never flat or dead. As Mr. Cosmo Monkhouse says in his recent introduction to the *Burlington Fine Arts Club Catalogue*, which has been already cited: "It would take a long time to exhaust the number of changes which the Chinese ring upon the many tints of blue and white—white sometimes white as curds, sometimes grayish, sometimes tinged with the faintest blue, like the film inside a bird's egg. But if the white is varied, what of the blue? Sometimes brilliant and opaque as lapis lazuli, sometimes pure and trembling as a sapphire, now almost black, now wholly gray, sometimes warm as purple, sometimes cold as a wintry sky. Whatever quality is taken is of course used throughout, but even this allows for great variation in shade; a dark and light blue are nearly always employed, and three, if not more, distinct tones are often seen on the same piece."



FIG. 223.—Crackled Fên-t'ing Vase, of the conventional form used for divin-  
ing rods, with bosses  
on the four sides  
carved in openwork  
as branches of peach  
fruit

Blue and white has always seemed to fascinate the artist, and Mr. Whistler has cleverly illustrated the style of the porcelain of this period,\* and not without catching some of the spirit of the Chinese decorator. It is interesting to compare his work with that of our artist; the slender-necked, globular bottle illustrated in Plate XLII happens to have been drawn by him in Plate XXIV, No. 255, in the work just quoted.

Blue and white may be divided into two classes: blue upon white, and white upon blue, the latter comprising those examples in which the blue predominates to the extent of furnishing the ground upon which the untouched portions of the white porcelain beneath form the design of the decorations. This is seen in the vase just referred to. Of the sixteen pieces of blue and white selected here for illustration, no less than thirteen are attributed to the reign of K'ang-hsi, although the marks of Hsüan-tê, Ch'êng-hua, and Chia-ching are inscribed on three of the objects. The reign always occupies this preponderating position in good collections. Plate II displays a magnificent example of the white upon blue class, the sprays of prunus shining in white reserve on the jar, which is covered all over, in the intervals of the floral decoration, with a reticulated ground of pulsating blue.

Before proceeding further with the description of the decorated porcelain, it seems advisable



FIG. 224.—Baluster Vase, of light  
porous material, painted in soft-  
toned blue under the undulatory  
"orange-peel" glaze, which is not  
crackled

\* *A Catalogue of Blue and White Nankin Porcelain*, forming the collection of Sir Henry Thompson. Illustrated by the auto-  
type process from drawings by James McN. Whistler, Esq., and Sir Henry Thompson: London, 1878.

to submit a scheme of classification under which its many varieties may be conveniently arranged. In its main lines I propose to follow Brongniart, who was the first, in his *Traité des Arts Céramiques*, which is still the classic of the art, to divide the colors used in the decoration of porcelain into three classes:

- A. Couleurs de grand feu.
- B. Couleurs de demi-grand feu.
- C. Couleurs de petit feu ou de moufle.

The colors employed in China which resist the most intense heat of the furnace are the cobalt-blue, the copper-red, and the sea-green celadon and deep-brown glazes, which are both derived from iron. The first two are painted with a brush on the raw white body of the piece (*sur le cru*), and subsequently covered with glaze, so that they are both underglaze colors, and the porcelain requires but one firing. The other two are applied as glazes previously prepared, in which the coloring material is mixed with a feldspathic flux combined with lime.

The second class of colors (*de demi-grand feu*) are fired in the same furnace as those of the first class (*de grand feu*), but the pieces are placed in the more temperate parts of the furnace, near the chimney at the back, and below the level of its lower orifice, where they escape the direct blast of the fire. The colors are three in number—turquoise-blue derived from copper, manganese-purple, and yellow prepared from an iron ore containing antimony. The glazes, together with the white glaze which accompanies them, are combined with a nitre or lead flux, and applied *sur biscuit*, the piece having been previously fired, unglazed, in the large furnace. This class comprises the typical *San ts'ai*, or "Three-color" decoration of the period.



FIG. 225.—Vase, decorated in underglaze copper-red of maroon tint, with a pair of five-clawed dragons; mark, K'ang-hsi.

The third class includes the enamel colors of the muffle stove, which are the same as those used in painted and *cloisonné* enameling upon copper. They are previously combined with a flux composed of powdered quartz, oxide of lead, and alkalis, into a kind of glass, which retains in solution a small percentage of the metallic oxide dissolved in the vitreous mass in the form of silicate. The coloring matters used in China are comparatively few, being oxide of copper for the greens, gold for crimson and pink, oxide of cobalt for the blues, oxide of antimony for the yellows, arsenious acid for the white and for moderating the tint of the other colors. Oxide of iron gives coral-red, and impure oxide of manganese black; these two colors are generally applied directly, mixed with white-lead and glue, as they will not combine with silica. The enamel painting may be executed, also *sur biscuit* or upon a crackled ground, or upon one partially or wholly invested with one of the highly fired, single colors, such as celadon, for example, or in combination with portions of decoration previously painted in one or more of the



FIG. 226.—Vase, with decoration worked in relief, painted in colors of the *grand feu* blue, maroon, and celadon; mark, K'ang-hsi.

underglaze colors. The changes that may be rung by the different combinations are almost infinite; some have been already described, others will follow later. Meanwhile the decorated porcelain of this reign will be grouped according to the scheme:

## TABLE OF DECORATED PORCELAIN.

*A. Colors of the grand feu.*

1. Decorated in underglaze cobalt-blue.
2. Decorated in underglaze copper-red.
3. Decorated in mixed colors.

*B. Colors of the demi-grand feu.*

4. Decorated in glazes of several colors.

*C. Colors of the Muffle Stove.*

5. Decorated in overglaze iron-red.
6. Decorated in sepia.
7. Decorated in gold and silver.
8. Decorated in mixed enamel colors.

1. *Decorated in Underglaze Cobalt-Blue.*—This class has been briefly noticed already. The blue and white, which is its normal decoration, is sometimes relieved by one of the monochrome grounds, such as "Nankin" yellow or coral-red, as it used to be in the preceding dynasty, or it may still continue to be combined with touches of enamel colors, as it was in the *Wan-li Wu-t'ai*, the typical polychrome decoration of the reign of *Wan-li*. In the beautiful little vase illustrated in Plate LXII, which is decorated in brilliant mottled blue of this period, the intervals between the panels are filled in with sprays of prunus, painted in delicate enamels, relieved by an iridescent black enameled ground.

2. *Decorated in Underglaze Copper-Red.*—The coloring material is painted with a brush in the same way as the blue upon the raw, white body of the porcelain; the glaze is blown on as soon as the piece is sufficiently dry, and it is afterward fired in the large furnace. The color comes out generally of a dull maroon tint, occasionally it is a bright ruby-red, or it may develop "peach-bloom" tints. The snuff-bottle illustrated in Plate XXXVII (2), which is painted with landscapes in maroon-red, is an example of this decoration. A fine specimen of the *K'ang-hsi* period is presented in Fig. 225. Another follows in Fig. 229.

3. *Decorated in Mixed Colors of the grand feu.*—This class is illustrated in Fig. 226 by a vase which may be thus described: A tall, ovoid vase, seventeen and a quarter inches high, with the decoration of a four-clawed, two-horned dragon rising from the waves of the sea on either side, executed in relief, and painted in three colors—underglaze blue, maroon, and celadon. The bodies of the dragons are brown, the manes are penciled in blue, the effulgent jewels which they are pursuing are of shaded brown. The crested waves at the base, which are painted in blue, have rocks rising out of them, on both sides, of sea-green celadon tint. The mark, written underneath in blue within a double ring, is *Ta Ch'ing K'ang hsi nien chih*—i. e., "Made in the reign of *K'ang-hsi* of the great *Ch'ing* [dynasty]." A vase of the same type is shown in Fig. 227, with raised outlines decorated in the same three colors—blue, maroon and celadon—display-



FIG. 227. *K'ang-hsi* Vase, with relief decoration painted in underglaze cobalt-blue, maroon, copper-red, and celadon.

ing the combat between the tiger, king of land animals, and the dragon, prince of the powers of the air.

4. *Decorated in Glazes of the demi-grand feu*.—This may be characterized as the typical decoration in three colors (*San ts'ai*). It must be distinguished from the *San ts'ai* decoration of the muffle stove, where the turquoise-blue is replaced by a green of camellia-leaf tint, which is sometimes penciled with black, while the other two colors remain the same. The latter has a

plain surface, the former is *truite*—i. e., crackled all over with a minute reticulation of fine superficial lines. A combination of two of the colors—turquoise and purple—is found in the little peach-shaped wine-pot shown in Fig. 217.

5. *Decorated in Iron-Red*.—This color, which is prepared from peroxide of iron, produced by the incineration of iron sulphate, being the same as that used for the coral-red monochromes, is penciled upon the surface of the white glaze, and fixed by being fired in the muffle stove. This decoration is the *Ts'ai Hung*, or "Painting in Red," of the Chinese. No more beautiful illustration of it could be imagined than that of the egg-shell bowl of this period, decorated with dragons, which is presented in Plate LXVII. This decoration in coral-red is often combined with gold, as in the club-shaped vase of the reign of *K'ang-hsi*, displayed in Plate XXVIII, in which the effect of the soft red, penciled in two shades, is enhanced by touches of gilding, with the addition of a spot or two of black to define the eyes of the dragons.

6. *Decorated in Sepia*.—This decoration, although described as making its appearance late in the reign of *K'ang-hsi*, is more characteristic of the succeeding reigns, especially of that of *Ch'ien-lung*. It is the *Ts'ai Shui Mo*, or "Painting in Ink," of the Chinese, and, like the last, it is often thrown out effectively by touches of gold. A striking example of painting in sepia is illustrated in Fig. 230, a ruby-backed plate with a picture of a "dragon barge" towed in procession, which is probably the work of a *Ch'ien-lung* artist.



FIG. 228. Vase of the *K'ang-hsi* period, richly decorated in brilliant enamel colors.

7. *Decorated in Gold and Silver*.—The metals, finely pulverized, were combined with oxide of lead by means of a little gum penciled upon the glaze and fixed in the muffle stove. Painting in gold (*Ts'ai Chin*) on a white ground was not so common in this reign, so we must refer to a wine-cup of the next reign, illustrated in Fig. 38 (a). In the reign of *K'ang-hsi* gold was lavished in the richest decoration of large vases enameled with the mazarin-blue and mirror-black grounds. Silver was chiefly employed in the ornamentation of the coffee-brown or dead-leaf ground. Both colors, especially the silver, resist wear and tear badly, so that only indistinct traces of the original designs may perhaps be detected in pieces that have survived to the present day.

8. *Decorated in Mixed Enamel Colors*.—This class includes the great majority of the decorated pieces of the time. Some of the varieties have been referred to already, and it has been explained how a brilliant green of shaded tones, usually laid on in thick patches, predominates among the colors, so that pieces of the old *famille verte*, even if they bear earlier marks of date, are generally to be attributed to this reign. The cobalt-blue, which during the *Ming* dynasty had been applied under the glaze, is now generally overlaid in the same way as the other enamel colors and fixed at the same firing. The other colors are red, yellow, and black, completing the "five colors" of the enameler. When blue and red are absent, we have the three-colored (*san ts'ai*) decoration of the muffle stove. The coloring of this inimitable period has an unmistakable *cachet* to an accustomed eye, which enables it to be distinguished at a glance from any repro-

PLATE XLVIII  
YUNG-CH'ENG DISH DECORATED IN COLORS

**L**ARGE ROUND DISH (Ta Kuo Pan), 20 inches in diameter, with a floral decoration, painted in the brilliant enamel colors of the Yung-ch'eng period, extending from the base over the rim and along the sides, as well as filling the interior of the saucer-shaped dish. The decoration consists of branches of the blossoming plum (mei-hua) mingled with sprays of pomegranate (shih-lu), both of which end off long before they reach over the rim to decorate the under border of the dish with the same white and red flowers. A clump of the branching sacred fungus (ling-chih), with its scolloped heads of diverse colors, is sprouting from the branch of the plum.

The mark penciled underneath in cobalt blue inside a double ring of the same color is Ta Ch'ing Yung ch'eng nien chih—i. e., "Made in the reign of Yung-ch'eng (1723-35), of the Great Ch'ing [dynasty]."

The companion dish, of the same size, style, and mark, is decorated, still more effectively, with branches of the tree peony (mou-tan), magnolia (yü-lan), and *Pyrus japonica* (hai-t'ang), and has trailing sprays of the three flowers extending round three fourths of the lower border. The large, conspicuous blossoms of the peony are nearly white, tipped with pink, and the magnolia-petals are filled in with the same white enamel.



1875

1876

1877

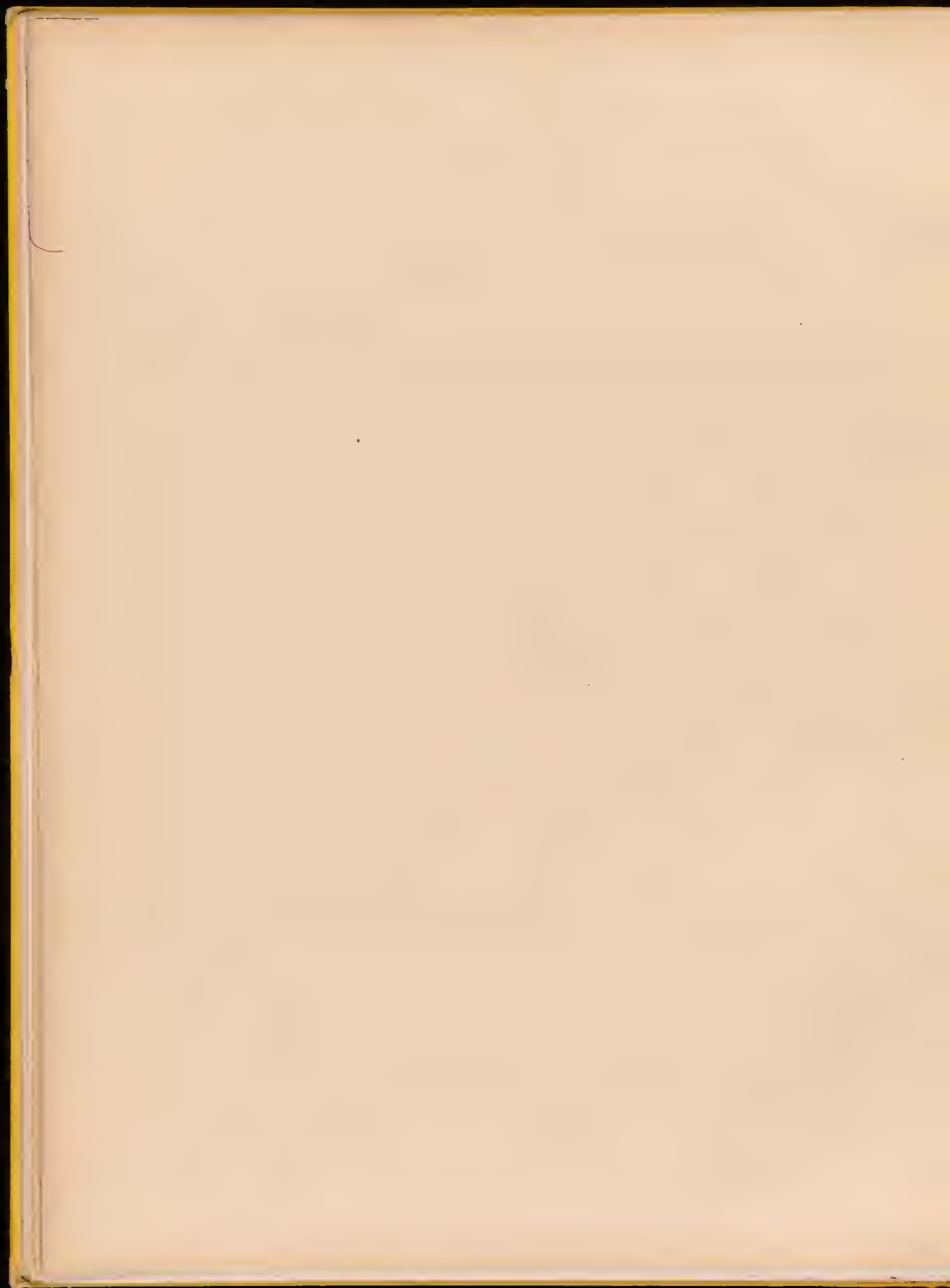
1878

1879

1880

1881





duction, whether native or European. The two club-shaped vases illustrated in Plates VI and XVII are picked specimens of the richest ornamentation in enamel colors; the egg-shell lantern in Plate XI and the statuette of the goddess Avalôkita in Plate LX are both fine examples of the *famille verte*. It will be sufficient to add a cursory description of two more pieces as typical examples of the *Wu ts'ai* and *San ts'ai* enamel decoration.

The first, Fig. 228, is a richly and artistically decorated vase of the *Wu ts'ai* class, painted in the most brilliant enamel colors of the *K'ang-hsi* period, with a few touches of gold. It is covered with panel pictures of varied form, displayed upon floral and diapered grounds, and separated by a band of floral diaper encircling the shoulder, interrupted by medallions containing butterflies. There are eight panels on the body arranged in two rows, of which the lower panels, representing lotus-leaves and other foliated designs, contain a grotesque lionlike monster standing upon a rocky shore; a pair of peacocks on a rockery with peonies; a pair of phoenixes by a spreading dryandra-tree; a warbler perched upon a prunus-tree with roses underneath. Of the panels in the upper row, two are filled with vases containing symbols of rank and honor, the incense-burning apparatus, and books, scroll pictures, lyres, and chess, the emblems of the "four liberal arts." The other two contain a pair of storks on a pine, with a peach floating in the waves below, and a grotesque monster overhead. The interspaces are filled with chrysanthemum, lotus, begonia, aster, trefoil panels on the neck contain rock-ground between is a spiral diaper trav-

The second (Fig. 82) is a choice colored "decoration of the muffle stove, purple, and yellow enamels. It is a character *fu*, "happiness," with a movable written hieroglyph. The handle replaced in metal. The base, union of the stuff in which the and borders are enameled pale ("longevity") characters of different green, upon a pale yellow which is precisely similar on of scrolled bands of lotus dew-white and purple blossoms, outlined with purple. In the framed in green relief, emblems of longevity: on the rock with the sacred fungus and a sacred stork; on the back, a peach-tree with a clump of bamboos, a tiger, and a pair of birds flying, all painted in the same soft colors.

There is a class of porcelain decorated *sur biscuit*, with colored glazes, comprising two or three of the above tints, which is not, properly speaking, painted. The designs, generally of floral character, having been previously worked in the paste and engraved with the point, the piece is fired; the details are afterward filled in with glazes of different colors, and the piece is fired again in the muffle stove. There are bowls, for example, with the *K'ang-hsi* mark underneath, engraved outside with branches of flowers growing from rocks—colored maroon, green, and white—relieved by a ground of imperial yellow, enameled plain yellow inside. The saucers—etched in the paste inside with a pair of dragons surrounded by scrolled waves, with one of the dragons colored green, the other purple, and the surrounding ground yellow, come under the same class. The Chinese distinguish them by the appropriate name of *Huang Lâ Huan*—i. e., "Yellow and Green in Panels."

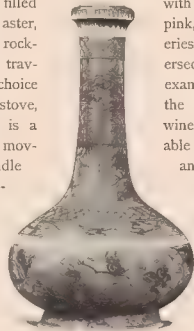


FIG. 229.—Solidly molded Vase, of finished form, decorated in bands of archaic design, with underglaze red of maroon tint

ster on a rock, with an eagle flying with butterflies and sprays of peony, pink, and other flowers. The two quarries with flowers and butterflies; the ersed by a pair of lizardlike dragons. example of the *San ts'ai*, the "Three—the surface being painted in green, wine-pot molded in the shape of the able lid formed by the first "dot" of and the tip of the spout have been glazed, is marked with the impres-

paste was pressed. The rims green. The spout has *shou* ferent style, alternately purple low ground. The decoration, front and back, is composed sign with green foliations and closed in a pale yellow ground middle are two foliated panels taining pictures of various front a pine overspreading a growing upon it, an axis deer,



FIG. 230.—Rose-backed Eggshell Plate, painted in sepi, with a picture of the "Dragon Procession."

## CHAPTER XI.

### LETTERS OF PÈRE D'ENTRECOLLES.

THESE letters, which have been already referred to more than once, were originally published in the *Lettres édifiantes et curieuses*, and they brought the first detailed account of the manufacture of Chinese porcelain to Europe. The two letters embody the results of the personal observations and researches of the Jesuit missionary, and of the information gathered from such of his Chinese converts as were engaged in the industry. They are dated Jao-chou, September 1, 1712, and King-tê-chên, January 25, 1722. When the second letter was written the long and brilliant reign of the Emperor K'ang-hsi was fast drawing to its close. Two years later—that is to say, in the second year of his successor, Yung-chêng—the Roman Catholic religion was rigorously proscribed, the foreign missionaries were exiled to Macao, and their churches throughout the different provinces were either converted into secular schools or destroyed, so that we get no more letters on the subject. These two were written at a most interesting time—at a time too in respect to which there is a complete dearth of Chinese information, so that no apology is needed for giving here a *précis*, in the form of an abridged translation, as literal as possible, of the writer's own words. The second letter, which is mainly supplementary and explanatory, has been interwoven with the first to save space, and at the same time to maintain the continuity of the subject. I have slightly modified the orthography of the Chinese words for the sake of uniformity, with the exception of that of the first two words that occur. These have since become classical in Europe, and are to be found in the dictionary of the Académie Française.

"The material of porcelain is composed of two kinds of earth, one called *po-tun-tse*, the other named *kao-lin*. The latter is disseminated with corpuscles which are somewhat glittering,\*

\* Crystals of mica. (The notes are added by the translator.)

the former is simply white and very fine to the touch. At the same time that a great number of large boats come up the river from Jao-chou to King-tê-chên to be loaded with porcelain, almost as many small ones descend from Ki-mên, laden with *pe-tun-tse* and *kao-lin* made into the form of bricks, for King-tê-chên itself produces none of the materials. *Pe-tun-tse*, of which the grain is so fine, is nothing but pulverized pieces of rock extracted from quarries, to which this form is given. It is not every stone that is suitable; if so, it would be useless to go for it into the next province.\* The good stone, the Chinese say, ought to have a slight tinge of green. The rocks are first broken into pieces with iron hammers, and the fragments are finely pulverized in mortars by means of levers which have stone heads mounted with iron. These levers are worked incessantly, either by men or by water-power, in the same way as the tilt-hammers in paper-mills. The powder is thrown into a large jar full of water, and stirred strongly with an iron shovel. When it has been left a few moments to settle, a kind of cream forms at the top four or five fingers thick; this is taken off and poured into another vessel full of water. The operation is repeated several times until only the coarse residuum which sinks to the bottom is left; this is taken back to be crushed again in the mortar.

"With regard to the second jar, into which has been thrown all that was collected from the first, after waiting until a kind of paste has formed at the bottom, and the supernatant water is perfectly clear, the water is decanted without disturbing the sediment. The paste is emptied into bottom of which is filled with a bed cloth of the size of the interior of the paste, it is covered with an-layer of bricks, which press out quite dry and hard, the paste is

canted without disturbing the sediment. The paste is emptied into a large kind of wooden case, the of bricks, over which is stretched a the case; this cloth is filled with other cloth, and then with a flat the water. Before it has become divided into little squares, which



FIG. 231. Covered Bowl of the K'ang-hsi period, with Taoist figures in relief, enameled *sur biscuit* in yellow, green, manganese purple, and white.



FIG. 232. K'ang-hsi Jar, blue and white decoration, with alternating grounds of white and mottled blue.



FIG. 233.—Censer of the K'ang-hsi period, with buff-tinted finely cracked glaze; stand and cover of carved wood.

are sold by the hundred. The name of *pe-tun-tse* is derived from the white color and the shape of these *briquettes*. There would be nothing to add to this work if the Chinese were not in the habit of adulterating their merchandise; but people who roll little grains of paste in pepper-dust to mix with genuine pepper-corns would hardly care to sell *pe-tun-tse* without mixing it with coarser matters, so that it has to be again purified at King-tê-chên before it is fit for use.

"*Kao-lin* requires a little less labor than *pe-tun-tse*; Nature has done the greater part. It is found in mines in the bosom of certain mountains, which are covered outside with a reddish earth. These mines are fairly deep; it is found there in masses, and is also made into square *briquettes* by the same method that I have described above. It is to *kao-lin* that fine porcelain owes its strength, and it is only a combination with the soft earth that fortifies the *pe-tun-tse*, which is derived from the hardest of rocks. A rich merchant told me that some years ago the

\* Ki-mên-hai is in the prefecture of Hui-chou-fu, in the province of An-hui, near the source of the Chang River, which flows by Ching-tê-chên.

English or Dutch had had purchased for them some *pe-tun-tse*, that they took to their country to make porcelain with, but that, having taken no *kao-lin*, their enterprise failed, as they confessed afterward. The Chinese merchant said to me, laughing, 'They wanted to have a body with no bones to sustain the flesh.'

"Besides the boats laden with *pe-tun-tse* and *kao-lin*, with which the river bank at King-té-chén is lined, others are found filled with a whitish and liquid substance. I have long known that this substance was the oil (or glaze) that gives porcelain its whiteness and its luster, but I did not know its composition, which I have at last learned. This oil is derived from the hardest stone. The same kind of rock which is used in the preparation of the *pe-tun-tse* can also be employed for the extraction of the glaze, but the whitest pieces are picked out from the heap, and those which have the greenest spots. The history of Fou-liang says that the best stone is that which has spots upon it like the leaves of the arbor vitæ,\* or reddish marks like

sesamum seeds. The rock must first be well washed, and then prepared in the same way as the *pe-tun-tse*. When there has been collected in the second jar the purest part of the matter that has been levigated in the first jar with all the usual precautions, to every hundred pounds or so of the cream one pound is added of a stone or mineral like alum, named *shih-kao*;† it must have been first roasted in the fire, and then pounded; it acts like rennet in giving a certain consistence, although the matter is always carefully kept in a liquid state.

"This stone glaze is never used alone; it is mixed with another material which forms its essence. This is its composition: Large pieces of quicklime are reduced to powder by sprinkling water upon them, and covered with a bed of dried ferns, upon which is spread another layer of quenched lime, and so on in succession, one layer upon the other; then the ferns are set on fire. After everything is burned, the ashes are spread upon new beds of dried ferns; this is repeated six or seven times in succession, or even oftener for the best glaze. When a sufficient quantity of lime and fern ashes has been burned, the ashes are thrown into a jar full of water. With each hundred pounds it is necessary to dissolve one pound of *shih-kao*, to stir the mixture thoroughly, and then to leave it in repose till there appears

on the surface a cloud or a crust, which is collected and thrown into a second jar. This operation is repeated several times. When a species of paste has formed at the bottom of the second jar, the water is decanted, and the liquid at the bottom is preserved as the second oil, to be mixed with the preceding.

"For a proper mixture, the two *purées* must be of the same thickness, which is tested by dipping in squares of *pe-tun-tse*. With regard to the quantity of the ingredients, the best glaze that can be made is a combination of ten measures of the first *purée* of stone with one measure of that made of the lime and fern ashes; the most sparing never put less than three measures to one. The merchants that sell the liquid sometimes dilute it with water, and conceal the fraud by adding a proportionate quantity of *shih-kao* to thicken it.

"Before explaining the method of applying the glaze it is necessary to describe the fabrication of the porcelain. In the less frequented parts of King-té-chén are vast sheds, surrounded by walls, in which one sees ranged, story above story, a great quantity of jars of earth. Inside these walls live and work an infinite number of workmen, each of whom has his allotted task. A piece of porcelain, before it leaves them to be carried to the furnace, passes through the hands of more than twenty persons.



FIG. 234.—Ewer with dragon handle and overlapping cover, decorated in blue with brocaded designs.

\* Dendrites of manganese oxide.

† Gypsum, or sulphate of lime. The action of this is supposed to be purely mechanical, quickening precipitation.

"The first work consists in purifying anew, by the same process of levigation and decantation, both the *pe-tun-tse* and the *kao-lin*. After having been purified, the two materials are combined in certain proportions: the finest porcelain is made of equal parts; for an inferior kind they use four parts of *kao-lin* to six parts of *pe-tun-tse*; the least that can be put is one part of *kao-lin* to three of *pe-tun-tse*.

"When mixed, the material is thrown into a large hollow or pit, well paved and cemented throughout, where it is trodden and kneaded to weld it to a proper consistence; this is very hard work, and it goes on incessantly, so that the Christians employed can not even come to church without providing substitutes.

"From the mass thus prepared, lumps are taken and put upon large slates, where they are kneaded, beaten, and rolled in every sense, taking the greatest care that there shall be no hollows left, and no admixture of foreign bodies. A hair, a grain of sand, would ruin all the work. From such elements are produced so many beautiful works of porcelain, some fashioned upon the wheel, others made simply by molds, and finished afterward with the polishing-knife.

"The plain, round pieces are all made in the first fashion. A cup, when it comes off the wheel, is very imperfectly shaped, like the top of a hat before it has been put on the shaping mold. The foot is only a piece of clay of the diameter that it is intended to have ultimately, and it is not excavated with the knife until all the other operations are finished. The cup, as it comes from the wheel, is first handed to a second workman, who is seated beneath. It is passed by him to a third, who presses it on a mold, and gives it its shape; this mold is fixed upon a kind of wheel. A fourth workman polishes the cup with a knife, especially round the rims, and makes it thin enough to be transparent; each time he scrapes it, it must be moistened carefully, or it will break. It is surprising to see the rapidity with which the vases pass through so many different hands, and I am told that a vase that has been fired has gone through the hands of seventy workmen.

"Large objects of porcelain are made in two pieces: one half is lifted upon the wheel by three or four men, who support it

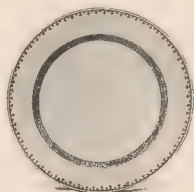


FIG. 235.—Eggshell Plate of pale-green celadon tint, overlaid with a decoration in white, and with overglaze blue round the borders.



FIG. 236.—Hexagonal Tripod Censer with overlapping cover pierced in openwork; of Ko Yao crackle, attributed to the K'ang-hsi period.

on each side while it is being shaped; the other half is fitted upon the first when it is sufficiently dried, and is cemented to it with porcelain earth, mixed with water (i. e., slip), which serves as mortar or glue. When quite dry, the place of junction is pared with a knife, inside and outside, so that, after glazing, there remains no inequality of surface. Handles, ears, and similar adjuncts are attached by means of slip in the same way. This refers principally to the porcelain which is made in molds, or by handwork, such as fluted pieces, or those of bizarre shape, such as animals, grotesques, idols, the busts ordered by Europeans, and such like. These objects, when molded, are made in three or four pieces, which are fitted together, and finished afterward with instruments adapted for excavating, polishing, and working the various details that have escaped the mold. As for flowers and other ornaments, which are not in relief, but, as it were, *in intaglio*, these are impressed on the porcelain with seals and molds; reliefs, ready prepared, are also put on, in the same way almost as gold lace is attached to a coat.

"I have lately investigated the subject of these molds. When the model of the piece of porcelain to be made is in hand, and it is such as can not be shaped upon the wheel by the potter, they press upon the model some yellow clay, specially prepared for molding; the clay

is impressed in this way, the mold being composed of several pieces of pretty large size, which are left to harden when they have been properly impressed. When they are used, they are put near the fire for some time, and then filled with porcelain earth to the thickness the piece is to have, and this is pressed into every part with the hands. The mold is held to the fire for a moment, to detach the "squeeze" from the mold. The different pieces which have been separately molded in this way are joined together afterward with a slip (Fig. 231). I have seen animals of massive proportions fabricated by these means; after the mass has been left to harden, it is worked into the desired form, and finished with the chisel; and, finally, each of the parts worked separately is adjusted. When the object has been finished off with great care, the glaze is put on, and it is then fired; it is painted afterward, if desired, in different colors, and the gold is applied, and then it is fired a second time.

"When the time has come to ennoble the porcelain by painting, it is intrusted to the hands of the *Hua-p'i*,\* or porcelain painters, who are almost as poor as the other workmen; not so



FIG. 237.—Set of K'ang-hsi Vases, artistically decorated with diapered borders in underglaze blue, inclosing panels painted in colors; European mounts.

astonishing a fact, however, as with a few exceptions they would pass in Europe only as apprentices of some months' standing. All the science of these painters, and indeed of Chinese painters generally, is not based on any principles; it consists only in a certain routine, helped by a vein of imagination limited enough. They are ignorant of every beautiful rule of the art. Still, it must be confessed that they paint flowers, animals, and landscapes, which are much admired upon porcelain as well as on fans and on lanterns of the finest gauze. The work of painting is distributed in the same workshop among a great number of workmen. One has the sole task of outlining the colored rings

that are seen on porcelain near the rims of the pieces, another sketches the flowers, which a third paints; this one is for landscapes, that one for birds and for other animals.

"With regard to the colors of porcelain they are of all sorts. In Europe hardly anything is seen excepting a bright blue upon a white ground, but I believe that our merchants have also imported other kinds.† There are some pieces with a ground resembling that of our burning-glasses; others are wholly red, and among these some have the red in the glaze (*yu-li-hung*); others have a *soufflé* red (*ch'ui-hung*), and are strewn with little points somewhat like our miniatures. When these last two kinds come out in perfect success—a work of some difficulty—they are infinitely esteemed and extremely dear.

"Lastly, there are porcelain vases with pictures of landscape scenes painted in nearly all the different colors, enhanced by the luster of gilding. These are very beautiful if no expense is spared; otherwise the ordinary porcelain of this kind is not to be compared with that painted

\* *Hua-p'i* means literally "painter on the raw body" (*sur le cru*), and, like so many terms of the Chinese *atelier*, indicates the greater antiquity of decorating in cobalt-blue than that of painting in enamel colors.

† The two illustrations (Figs. 233 and 234) are specimens of blue and white designs painted for Europe about this time. The cylindrical vase is decorated in alternate bands of blue upon white, and blue with white reserves; and similar vases are often found painted in enamel colors of the period. The other is painted in blue with rich panels of floral brocade.

PLATE XLIX  
CHIA CHING BLUE AND  
WHITE JAR

**L**ARGE GLOBULAR JAR (Kang), painted in deep brilliant blue, of the tone of coloring and archaic decorative style characteristic of the Chia-ching period of the Ming dynasty. The body is divided into four panels of foliated outline, which are filled with landscape pictures of familiar life in China. In front a poet is seated in a pavilion composing, while a boy attendant holds up his ink-pallet, and two others carry wine-pot and cup. Two men are working in the garden below, the trees of which are the symbolical pine, bamboo, and plum. The scene on the left depicts a scholar on horseback riding to visit a friend in his mountain retreat, at the door of which an attendant is knocking to announce his arrival. Similar scenes occupy the other two panels. The recesses are filled with alternate sprays of peony and chrysanthemum, and the decoration is completed by a band of sacred fungus round the shoulder of the jar, and another of beaded gadroon pattern round the base.

Underneath, boldly written in dark underglaze cobalt blue, is the mark Ta Ming Chia ching (1522-66) men chih—i.e., "Made in the reign of Chia-ching, of the Great Ming [Dynasty]"



[illegible]

1. 5.13 Will 4.11.11 at 10.00 AM





in azure blue alone. The annals say that in ancient times the people used only white porcelain, probably because the ordinary blue had not yet been discovered.

"The azure blue is prepared in this way: It is buried in the gravel, which is half a foot thick in the floor of the furnace, and roasted there for twenty-four hours; then it is ground to an impalpable powder, in the same way as the other colors—not on marble, but in a great porcelain mortar, the bottom of which is unglazed, as is also the head of the pestle with which the colors are pounded.

"The red that is made from green vitriol (*tsao-fan*) is prepared by placing about a pound of the iron crystals in a crucible, which is well luted to a second crucible, having in the top a small aperture, covered, however, in such a way that it can be easily uncovered if needful. The whole is surrounded by a large charcoal fire in a reverberating brick furnace. As long as the smoke which rises is all black, the material is not yet fit; but it is as soon as a kind of thin, fine cloud appears. Then they take a little of the material, mix it with water, and try the effect on a piece of pine wood. If it comes out a good red, they take out the brazier in which it is inclosed and partially cover the crucible. When quite cold, a little cake of this red is found at the bottom of the lower crucible, while the finest red lines the upper crucible. One pound of iron sulphate furnishes four ounces of the red used in painting porcelain. This red is combined with five times its weight of white lead, the two powders are passed through a sieve, and mixed together dry. The mixture is incorporated with water thickened with a little ox-glue when it is painted on, so that it may not run down the side of the vase.

"Although porcelain is naturally white, and the glaze serves, moreover, to augment its whiteness, yet there are certain figures in the production of which a peculiar white is painted upon porcelain decorated in different colors. This is prepared by pulverizing a transparent rock,\* which is calcined by inclosing it in a porcelain crucible, and by burying the crucible in the gravel floor of the furnace, in the same way as the azure-blue. It is mixed with water, without glue, with twice its weight of white lead, and painted on with a brush. The same white is used for combining with other colors to modify their tints. Added to the ordinary green, for example, in the proportion of two parts of white to one part of green, it makes the pale, clear green, which is often associated with the darker shade.

"With regard to the other colors which are painted on the porcelain for the second firing, the dark green is prepared by combining an ounce of white lead, with a third of an ounce of powdered quartz, and a tenth to a twelfth of an ounce of *t'ung hua pien*, which is nothing else than the scum of copper which rises to the surface when the metal is melted. It is necessary to separate carefully the granules of metallic copper which are found mixed with it, as these are bad for the green.

"The yellow color is prepared by combining an ounce of white lead, with a third of an ounce of pulverized quartz, and one fifty-fifth of an ounce of primitive red.† A second workman tells me one fortieth of an ounce of the last ingredient.

"The deep blue with a shade of violet is prepared by mixing one ounce of white lead, with one third of an ounce of pulverized quartz, and one five-hundredth of an ounce of azure-blue. Another workman says four five-hundredths of the blue.

"The black is prepared by mixing the azure-blue mineral with water thickened with ox-glue and a little lime. When this is painted on over the glaze, the black parts of the design are covered with white glaze, which incorporates with the black during the second firing, in the



FIG. 238.—Finely crackled Turquoise Bottle of the K'ang-hsi period, one of a pair; with European mounts

\* The *caillon transparent* here spoken of is no doubt arsenious acid, the native arsenical ore, which occurs in large translucent masses. The effect of the decoration in white upon a pale-green celadon ground is seen in Fig. 235.

† The mineral referred to here has been analyzed by Brongniart, and found to be a magnetic iron ore (*fer oligistique terreuse*) containing antimony.

same way as the blue is incorporated in the ordinary glaze, when blue and white porcelain is baked in the furnace.

"There is another color called *tsiu*,\* from which the deep violet is made. It is found in Canton, and it comes also from Peking, the last being much the best. It sells for about two dollars the pound. This material melts, and when it is melted, or softened, jewelers apply it in the form of enamel to silver objects, such as rings or hairpins. Like the other colors just described, this is used only on the porcelain which is re-fired. It is not roasted like the ordinary azure-blue, but pounded and reduced to the finest powder, which is thrown into a vessel full of water and shaken a little; the water removes some impurities, remains at the bottom, is kept and appears grayish, but recovers its color when re-fired. It can be painted on, and the crystal powder, which for use. It loses its fine color as soon as it is mixed with pure water or with a little glue added.

"To gild or to silver porcelain, a tenth part by weight of white lead is mixed with the gold or silver leaf, which has been previously dissolved by the use of gum. The gold after it has been water over the bottom of a porcelain saucer till it forms a little 'gold sky' under the water. This is dried, and, when used, a sufficient quantity is dissolved off by weak glue, mixed with the white lead, and applied in the same way as the enamel colors. Silver comes out with great luster upon the coffee-brown or 'dead-leaf' glaze. If some pieces are painted in gilded silver, the silver will disappear to a degree of heat required to give vered porcelain must not be fired so long in the little furnace, otherwise the gold has attained the proper luster.

"Sometimes, porcelain is fired a second time only to conceal some defect, which is painted over with colors. The richly colored, is not without attraction for many. When dry it is put into the stove and arranged in tiers and piles, the small pieces within the large, painted parts do not touch. The only taking care that the if only small ones are required, of clay. One which I saw was almost as broad as one of our largest wine-casks; it was made of several pieces of the same material as the clay seg-fired, being built of large, rounded pieces, a finger's breadth thick, a foot high, and a foot and a half broad, well cemented together. The bottom of the furnace was elevated about half a foot from the ground, and supported by two or three rows of bricks; the furnace was encircled by a well-built wall of bricks, with three or four air-holes at the bottom. There is a space about half a foot broad between this wall and the furnace, which is left empty for the charcoal fire, except where it is traversed by supporting spurs of masonry. When the charge has been introduced, the top of the furnace is closed with pieces of pottery, similar to those of the sides of the



FIG. 239.—Tall Beaker of K'ang-hsi porcelain, decorated in the characteristic enamels of the period, showing a Court interior, with a dancing girl, accompanied by an orchestra, performing before the Imperial circle. Height, 30 inches

\* This must be a misprint for *ts'ui*, which is the name of the cobalt-blue glaze used in China by enamellers on copper and silver. It is of somewhat similar composition to the "deep blue with a shade of violet" described just before, and is a characteristic color of the period.

† The furnace used by the *shouan* enamellers at Peking is a small iron cylinder with a movable cover. This is imbedded in charcoal, held by a larger outside cylindrical case of iron netting. It is fired in the open courtyard, and the fire is kept up by men standing round wielding large fans.

furnace, which fit inside each other, and are cemented together by mortar or moistened clay. An aperture is left in the middle, to observe when the porcelain is properly baked. A quantity of charcoal is burned at the bottom of the furnace, and also at the same time upon the cover, from which pieces of lighted charcoal are thrown into the space between the brick wall and the furnace. The potsherd which has been put upon the hole in the cover is removed for inspection from time to time, until it appears that all the enamels are thoroughly fired.

"There is a kind of colored porcelain here which is sold at a cheaper rate than that which is painted with the colors of which I have just spoken. To make work of this kind it is not necessary that the materials used should be so fine; cups are taken which have already been baked in the large furnace, without having been glazed, and which are consequently quite white and without luster; they are colored by immersing them in a jar filled with the prepared color, when they are required to be of single color; if they are wished to be of different colors, such as the pieces called *huang li huan*, which are divided into a variety of panels, one green, another yellow, etc., then the colors are applied with a large brush. This is all the decoration given to this porcelain, excepting that, after it has been fired, a little vermilion is sometimes put upon certain parts, as, for example, upon the beaks of birds; but this last color is not baked, because it would disappear in the furnace, so it lasts but a very short time. After the colors have been applied, the porcelain is re-fired in the large furnace at the same time as other pieces that have not been baked before; care must be taken to place it at the back of the furnace and below the vent, where the fire is not so active, because an intense heat would destroy the colors. The colors adapted for this kind of porcelain are prepared in this way: The green\* is made of *tung hua*



FIG. 240.—Tall Ovoid Jar with rounded cover, painted in brilliant enamel colors of the best K'ang-hsi period; mark, a double ring

*pien* (oxide of copper), saltpeter, and powdered quartz reduced separately to an impalpable powder, and mixed together with water. The commonest azure-blue material mixed with saltpeter and pulverized quartz forms the violet. The yellow is made by combining three-tenths of an ounce of iron-red with three ounces of powdered quartz, and three ounces of white lead. The white is made by the addition of four-tenths of an ounce of pulverized quartz to an ounce of white lead. All these ingredients are mixed together with water. This is all that I have been able to gather about the colors of this sort of porcelain, not having any of the workmen among my converts.

"To return to the single colors. The glaze red called *yu-li-hung* is made from granulated

\* The copper oxide combined in this way with a flux of nitre and silica produces the color we call "turquoise-blue," but which the Chinese call "peacock-green" (*hung-chao lu*). The decoration *sur biscuit*, described above, fired in the large furnace, is known technically as that of the colors of the *deux-grand feu*.

red copper, and the powder of a certain stone which has a shade of red,\* ground together in a mortar with a boy's urine, and mixed afterward with some of the white glaze material. I have not been able to discover the quantities of these ingredients; those who have the secret are very careful not to divulge it. The mixture is applied to porcelain that has not been baked before, and it is not given any other glaze; only special care must be taken that during the



FIG. 241.—Fluted Vase and Stand of the Kang-hsi period, painted in soft colors of the *famille verte*.

firing the red color does not run down to the bottom of the vase. If the red comes out pure and brilliant and without any stain, it is one of the most perfect achievements of the ceramic art. The porcelain does not ring when struck. I have been assured that when this red is about to be applied, the porcelain is not made of *pe-tun-tse*, but that yellow clay is used in its place to mix with the *kao-lin*, prepared before it and in the same way with the *pe-tun-tse*. The granules of copper which give the red are obtained during the purification of silver ingots, of which there are so many of base alloy in circulation. The refiners, while the melted copper is hardening and congealing, dip a small broom into water, and sprinkle some of it over the liquid copper; the film which then forms on the surface is lifted off with little iron tongs and thrown into cold water, where it forms into granules.

"The *soufflé* red (*ch'ui-hung*) is made in this way: Having prepared the red, a bamboo tube is used which has one of its ends covered with a very close gauze; this is dipped gently into the color so as to cover the gauze, and then, by blowing through the tube, the color is projected upon the porcelain, which will be found strewn all over with little red points. This kind of porcelain is even rarer and dearer than the preceding, because the execution is still more difficult.

"There is also a *soufflé* blue (*ch'ui-ch'ing*) which is much easier to apply successfully. The finest azure-blue, prepared by roasting the cobaltiferous mineral, is mixed with water to a proper consistence, and blown in the same way upon the surface of the unbaked vase; it is allowed to dry, and is then covered with the ordinary white glaze, either alone or mixed with the 'crackle glaze' (*sui yu*), if the porcelain is to be veined. It is finally fired in the large furnace. The cobalt-blue monochrome glaze, whether it be *soufflé* or applied by immersion, may have a decoration traced upon it by artist workmen with the point of a long needle; the needle removes as many little points of the dry azure color as may be necessary to represent the outline of the design, after which the piece is glazed. After the porcelain has been fired, the figures appear as if painted in miniature.

"The black porcelain called *wu chin* has also its price and its beauty; it is a brilliant black, somewhat like that of our burning-glasses, which is very effective in combination with the gold decoration with which it is usually associated. The unbaked porcelain is immersed in a fluid mixture composed of prepared azure blue; † it is not necessary to use the finest azure, but it must be rather thick, and mixed with some of the brown mineral (*tsü-chin*) and the materials of the ordinary white glaze. For example, to ten ounces of azure pounded in the mortar are added one cup of *tsü-chin*, seven cups of *pai yu* (prepared from feldspar), and two cups of the lime and fern-ash mixture. No other glaze is necessary; when the porcelain is fired, it must be placed in the middle of the furnace, and not near the roof, where the heat would be too intense. The gold designs are penciled on afterward, and the piece is fired anew in a particular furnace.

\* Probably amethystine quartz.

† It should be rather "a *purée* made of calcined cobaltiferous oxide of manganese," the ore which the Chinese used to produce blue, and which, if not covered with glaze, comes out black.



FIG. 242.—Tall club shaped Vase covered with a *soufflé* coral-red ground, with large reserves of varied form, filled with floral decorations in Kang-hsi colors.

PLATE L  
TWO PEACH-BLOOM  
TAACHU TATJONS

**V**ASE (Hua Ping), of the "peach-bloom" type, invested with a grayish-green glaze variegated with streaks and mottled clouds of intense emerald-green, passing into olive at the lower edge as they "run" down over the field. A blush of "crushed strawberry" tint is seen near the rim at the base. The magnificent coloring seems to be an accidental success of the potter, due to prolonged firing of a glaze unusually rich in copper. The usual mark of Ta Ch'ing K'ang-hsi nien chih, "Made in the reign of K'ang-hsi, of the Great Ch'ing [dynasty]," pensive underneath in cobalt blue, has also "run," the characters being much blaried. The lip has been replaced in gold.

2. VASE (Hua Ping), of the "peach-bloom" type, clad in a rich, smooth glaze of charmingly uniform color, a pinkish pearl-grey, reminding one of the hue of the opening bud of the lavender. It is flecked with a few olive-brown spots in the receding hollow of the neck. It is of perfect technique, with the lip defined by a rounded edge, and the foot enameled pure white underneath, but not inscribed. The interior of the mouth exhibits a mottled glaze, displaying the most beautiful "peach bloom" tint. Period, K'ang-hsi (1662-1722).



THE  
LIBRARY  
OF THE  
MUSEUM  
OF  
COMPARATIVE ZOOLOGY  
AND  
ANATOMY  
OF THE  
MUSEUM OF  
COMPARATIVE ZOOLOGY  
AND  
ANATOMY  
OF THE  
MUSEUM OF  
COMPARATIVE ZOOLOGY  
AND  
ANATOMY

1891







"The glaze referred to just now, called *tsü-chin*—i. e., 'burnished gold' (or *bruné*)—I should name rather 'bronze-colored,' 'coffee-colored,' or 'dead-leaf' (*couleur de feuille morte*). It is a recent invention;\* for its composition, common yellow clay is taken, levigated in the same way as the *pe-tun-tse*, and mixed with water to the same consistence as the ordinary white feldspathic glaze. The *tsü-chin purée* is first mixed with the feldspathic *purée*, and some of the lime and fern-ash *purée* of the same consistence is afterward added to the mixture. The proportions of the three ingredients depend upon the tint required; it may range from that of 'old gold' to the darkest chocolate color.

"I have been shown this year (1722), for the first time, a species of porcelain which is now in fashion (*à la mode*): Its color approaches that of the olive and is given the name of *lung-ch'uan*. I have heard it called *ch'ing kuo*—the name of a fruit which nearly resembles the olive.† This color is given to porcelain by mixing together seven cups of the *tsü-chin purée*, four cups of feldspathic *purée*, two cups of lime and fern-ash *purée*, and one cup of crackle *purée*. The last, named *sui yu*, which is prepared from a kind of rock, causes a quantity of veins to appear on the porcelain; when it is applied alone, the porcelain is fragile, and does not ring when struck, but, when mixed with other glazes, though reticulated and is not more fragile than usual. The ordinary variety is marbled all over, and cut in every direction with an infinity of veins; from a distance it might be taken for a broken piece with the fragments remaining in mosaic. The color is usually grayish.

"They tried lately to mix gold leaf and powdered quartz with the ordinary glaze, and applied it like the red glaze, but the attempt failed, as it was proved that the *tsü-chin* glaze excelled in grace and luster. At one time bowls were made with the 'golden glaze' outside and pure white within; another variation followed, when, upon a bowl to which they were going to apply the *tsü-chin* glaze, they stuck on, in one or two places, a round or square of moistened paper. The paper was taken away when the glaze had been applied, and the space filled in with a painting in red or in azure blue. Sometimes such medallion spaces were colored with a blue or a black ground, and, after having been fired, were penciled in gold and fired anew; a number of such different combinations might be imagined.

"Not long ago a new material was discovered that could enter into the composition of porcelain. This is a stone, or species of chalk, called *hua-shih*,‡ the same which Chinese doctors use to make a draught which they say is detergent, aperient, and refreshing. The potters use it to replace the *kao-lin*. Porcelain fabricated with *hua-shih* is rare, and much dearer than the other; it has an extremely fine grain, and with regard to the work of the brush, if it be compared with ordinary porcelain, it is like vellum compared with paper. Moreover, this porcelain is so light as to surprise one accustomed to handle other kinds of porcelain; it is



FIG. 243.—Tea-bowl and Cover, of crackled, soft-looking Pên-Tung ware, painted in blue.

\* The worthy father must be mistaken here, as we extracted a detailed prescription in Chapter VIII from the records of the Ming dynasty. The color referred to is the well known *faul laque* of French ceramic writers.

† The Chinese olive, so called, is the fruit of a species of *canarium*.

‡ *Hua-shih* is steatite, which is widely used in China as a febrifuge. But many other substances have been sent to Europe under the same name, so that Salvétat writes that it is sometimes a mixture of steatite and amorphous, at others ferruginous clay, or impure *kao-lin*. Vogt says (*La Porcelaine*, page 225), "It is a natural mixture of two thirds of *kao-lin* and one third of white mica." The peculiar porcelain made of it, as described above, is the *sha t'ai* of the Chinese, the "soft paste" of collectors, described in the last chapter, distinguished by its light weight, its tendency to crackle, and the fine, neat lines of its decoration when painted in cobalt-blue.

also much more fragile than the common sort, and it is difficult to seize the proper moment of its firing. Some, who do not use the *hua-shih* to make the body, content themselves with making a kind of glue of it, in which they immerse the porcelain when it is dry, so that it takes up a layer, on which to receive the colors and the glaze, by which means it acquires a certain degree of beauty. The *hua-shih* is washed when it is taken from the mine and prepared like the *kao-lin*. I am assured that porcelain can be made of it alone without anything else mixed, but one of my converts, who works with it, tells me that he combines eight parts of *hua-shih* with two parts of *pe-tun-tse*. It is five times the price of *kao-lin*. It is also used for painting designs over the glaze in slip.

"There is one secret that the Chinese lament having lost: they once had the art of painting upon a porcelain bowl fish or other animals, which became visible only when the porcelain was filled with some liquid. This kind of porcelain was called *chia-ch'ing*—that is to say, 'azure put in press,' indicating the position of the color. The porcelain to be painted thus must be very thin; when it has been dried, the color is applied with a strong touch, not outside, as usually, but inside, on the sides of the cup; the ordinary decoration is fish, the most natural thing, as it were, to appear when the cup is filled with water. As

soon as the painting is dry a light layer of slip is spread over it, which confines the color between two coats of earth. When the slip has dried, the glaze is put on inside the cup, which is afterward put upon the polishing wheel and cut away outside as thin as possible without penetrating to the color, and lastly the outside is glazed by immersion. When everything is dry it is fired in the ordinary furnace. The work is extremely delicate, and demands a skill that the Chinese seem no longer to possess.

"There is another kind of porcelain made here with an outer pierced casing, carved in openwork (*à jour*), so as to inclose the cup which holds the liquid. The cup and the pierced casing form one piece. I have seen other charming pieces in which Chinese and Tartar ladies are painted after life, with the costume, the coloring, and the features, all finished in the most *recherché* style, so that at a distance the work might be taken for an enamel.

"To-day, it may be said, there is a renaissance, and the beautiful azure reappears upon porcelain once more. When it is applied it is of a grayish-black color; when it is dry and it has been coated with glaze it is eclipsed altogether, and the porcelain appears perfectly white; the colors are then buried under the glaze, but the fire brings them out in all

their beauty, almost like the heat of the sun as it brings out from a chrysalid a gorgeous butterfly in all its brilliant hues.

"The place where the furnaces are presents another scene. In a kind of vestibule which leads to the furnace are seen piles of cases made of clay, the *seggars* in which the porcelain is incased. The small pieces, like the cups intended for tea or chocolate, are put several in one case; the large pieces have a separate case for each one. The workman copies Nature, which protects fruits within an envelope, so that they may be gradually ripened by the heat of the sun. The cases are placed in columns inside the furnace, the two lowest in each column, imbedded in the gravel floor, being left empty, because the fire has no power so low down. In the middle piles, which are seven feet high, are placed the finest porcelains, at the back of the furnace the coarser kinds, near the entrance the pieces of strong color which are made of



FIG. 244.—Ground of mottled blue (*Mei fausse*), penciled in gold, with white reserves painted in underglaze blue and enamel colors.

PLATE LI

"PEACH-BLOOM" AND "CLAIR  
DE LUNE" VASES

**F**LOWER VASE (Hua Ping), of graceful shape, exhibiting in typical form the wotted play of colors characteristic of the celebrated "peach bloom" glass. The three tints distinguished by the Chinese connoisseur are all seen in this illustration—*mei*, the *chang tou hung*, or "haricot-red," of the ground, the *mei kuei pan*, or "rose spots," and the clouds of *ping-kueo ch'ing*, or "apple-green." The glass ends below in the usual sharply cut straight line, so as to leave a rim of biscuit round the foot, which is deeply hollowed out under each. The mark penciled in brilliant underglaze blue is composed of six minute characters arranged in two columns, reading, *Ta Ch'ing K'ang hsi nien chih*, "Made in the reign of K'ang-hsi (1662-1722), of the Great Ch'ing [dynasty]."

2. **OVOID VASE** (Hua Ping), one of a pair, of the same period as the last, and with the same mark underneath written in still more minute blue characters, covered with a monochrome glaze of pale sky-blue tint, a charming example of the rare *yueh pai*, literally "moonlight white," or *clair-de-lune* glass.



PLANTAIN

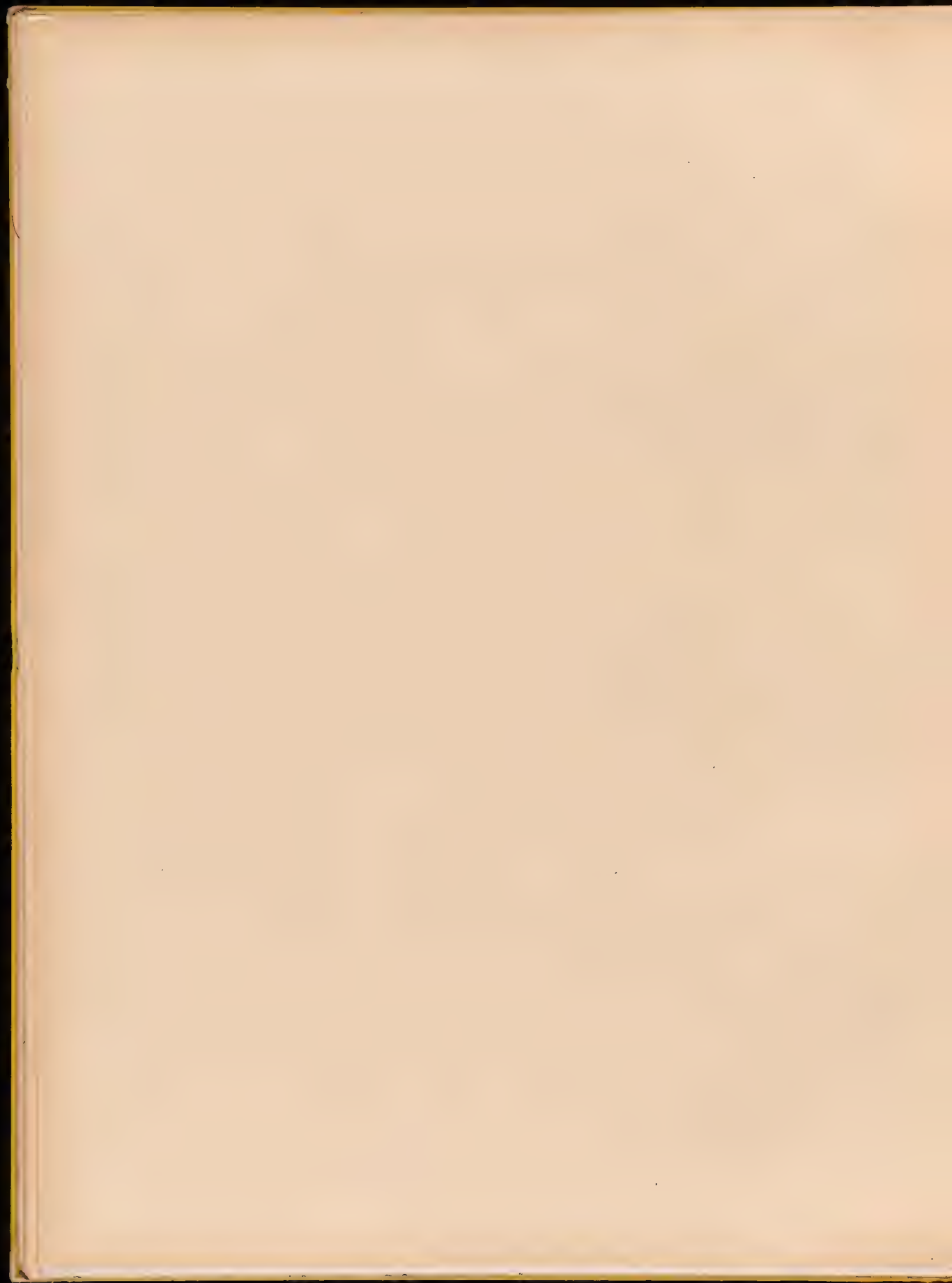
The plantain is a very common plant in the tropics. It is a large, broad-leafed plant with a thick, fleshy stem. The leaves are long and narrow, with a prominent midrib. The plantain is used for many purposes, including as a food source and for medicinal purposes.

PLANTAIN



The plantain is a very common plant in the tropics. It is a large, broad-leafed plant with a thick, fleshy stem. The leaves are long and narrow, with a prominent midrib. The plantain is used for many purposes, including as a food source and for medicinal purposes.





materials containing as much *po-tun-tse* as *kao-lin*, and the glaze of which is prepared from the rocks with blackish or red spots, because this glaze has more body than the other. The cases are made of different colored clays produced in the neighborhood, kneaded together, and are fashioned upon the wheel.

"Some one hundred and eighty loads of pine fuel (of a hundred and thirty-three pounds weight each) are consumed at every firing, and it is surprising that no ashes even are left. It is not surprising that porcelain is so dear in Europe, for, apart from the large gains of the European merchants, and of their Chinese agents, it is rare for a furnace to succeed completely; often everything is lost, and on opening it the porcelain and the cases will be found converted into a solid mass as hard as rock. Moreover, the porcelain that is exported to Europe is fashioned almost always after new models, often of *bizarre* character, and difficult to reproduce; for the least fault they are refused, and remain in the hands of the potters, because they are not in the taste of the Chinese and can not be sold to them. Some of the elaborate designs sent are quite impracticable, although they produce for themselves some things which astonish strangers, who will not believe in their possibility.

"I will give some examples of these. I have seen here a large porcelain lantern made in one piece, through the sides of which shone a candle, placed inside, so as to light a whole room; this work was ordered seven or eight years ago by the heir-apparent.\* The same prince ordered, at the same time, various musical instruments, and among others a kind of little mouth-organ called *tséng*, which is about a foot high, composed of fourteen pipes, and the melody of which is pleasing enough; but every attempt at making



FIG. 245.—Tsé-chin ground of yellow-brown tint, with reserve medallions in blue and white.



FIG. 246.—Hexagonal White Vase, of light Fén-Ting type, sparingly cracked, with twigs of prunus winding in open relief round the shoulder.

this failed. They succeeded better with flutes and flageolets, and with another instrument called *yün-lo*, which is composed of a set of little round and slightly concave plaques, each of which has its different note; nine of these are hung in three tiers in a square frame, and played upon with rods, like the tympanum; a little chime is produced to accompany the sound of other instruments, or the voice of singers. It required, they tell me, many trials before they succeeded in finding the proper thickness and density to produce correctly all the notes of the scale. I imagined myself that they had the secret of inserting a little metal in the body of the porcelain, to vary the notes; but have been undeceived, for metal is so ill adapted to combine with porcelain that if a copper 'cash' happened to be put upon the top of a pile of porcelain in the kiln, the coin as it melted would pierce all the cases and porcelain in the column, so that a hole would be found in the middle of every one. To return to the rarer works, the Chinese succeed best in grotesques, and in the representation of animals.

The workmen make ducks and tortoises which will swim in water. I have seen a cat painted after life, in the head of which a little lamp had been

put to illuminate the eyes, and was assured that in the night the rats were terrified by it. They make here too very many statuettes of Kuan-yin,† a goddess celebrated throughout all China, represented holding an infant in her arms, and worshiped by sterile women who wish to have children.

"There is another kind of porcelain, the execution of which is very difficult, and which has consequently become exceeding rare. The body of this porcelain is extremely thin, and its surface very smooth inside and out; notwithstanding which there can be detected in it, on close

\* One of these beautiful eggshell lanterns is illustrated in Plate XI. The heir apparent was the fourth son of the emperor, the prince who reigned afterward as *Yung-ching*. It is interesting to find him mentioned as patronizing the art so early as 1704 or 1705.

† Refer to Plate LX for a finely decorated figure of the period. Kuan-yin is the Buddhist divinity Avalokita.

inspection, molded designs, such as a ring of flowers, or other like ornaments.\* They are executed in this way: When it has been shaped upon the wheel it is pressed upon a mold carved with the designs which are impressed inside, and then it is pared down outside, as finely and thinly as possible, with the knife on the polishing wheel, to be ultimately glazed and baked in the ordinary furnace.



FIG. 247. Large Bottle-shaped Vase of K'ang hsi blue and white of brilliant color, with sprays of prunus spreading upward from the base to cover its surface with white flowers and buds. The slightly everted lip is defined by a light band of triangular fret; no mark.

"European merchants demand sometimes from the Chinese workmen porcelain slabs, to form in one piece the top of a table or bench, or frames for pictures. These works are impossible; the broadest and longest slabs made are only a foot across or thereabouts, and if one goes beyond, whatever may be the thickness, it will be warped in baking. The extra thickness does not facilitate the work, rather the contrary; and this is why the native slabs, instead of being made thick, are formed of two faces, with a hollow interior, traversed by a solid cross-piece; these slabs, used for inlaying carpentry, have two holes pierced at either end, so that they may be inserted in a bed, or in the back of a chair, when they look very effective.

"The mandarins, who know the genius of Europeans for inventions, often ask me to have brought from Europe novel and curious designs, in order that they may present to the emperor something unique. On the other hand, the Christians press me strongly not to get any such models, for the mandarins are not so easy to be convinced as our merchants, when the workmen tell them that a task is impracticable; and the *bastinado* is liberally administered before the mandarin will abandon a design which may bring him, he hopes, great profit.

"As each profession has its particular idol, and divinity is conferred here as easily as the rank of count or marquis is given in some European countries, it is not surprising that there should be a god of porcelain. The *Pou-sa* † (the name of this idol) owes its origin to these

kinds of designs which it is impossible for the workmen to execute. They say that formerly an emperor decreed positively that some porcelain should be made after a model which he gave; it was represented to him several times that the thing was impossible, but all these remonstrances served only to excite more and more his desire. His officers persecuted the workmen incessantly. The poor wretches spent all their money and gave themselves infinite pains, but they got nothing but blows in return. At last one of them in a moment of despair threw himself into the burning furnace and was consumed in an instant. The porcelain which was being baked came out, they say, perfectly beautiful, and pleased the emperor, who demanded nothing more. After his death the unfortunate man was regarded as a hero, and he became in course of time the idol who is now the protector of the workers in porcelain.

"Porcelain having been so highly esteemed through so many centuries, one would wish to know in what respects that of the earlier times differs from that of our own days, and what

\* For a striking example of this work, refer to Plate LXVII.

† *Pou-sa* is the Chinese contraction of the Sanskrit *Bodhisattva*, a personage who has only one more stage of human existence to pass through before he becomes a Buddha. It is applied secondarily to any idol. The *Pou-sa*, who has become proverbial in Europe as the god of luxurious indolence, often molded in porcelain, is the representation of *Mâtréya*, the coming Buddha or Messiah of the present Kalpa.

PLATE LII

"PEACH-BLOOM" VASE WITH  
FOLIATE BASE

**F**LOWER-VASE (Hua  
ping), 7<sup>1</sup>/<sub>2</sub> inches high, with a  
ring of upright, foliated panels  
molded in slight relief on the paste  
round the base. The upper part of  
the neck, which had a slightly flaring  
mouth, has been ground down and  
mounted with a silver collar of Japa-  
nese workmanship. The vase is ename-  
led with a "peach-bloom" glaze of  
"crushed-strawberry" tint, flecked with  
spots of darker red, and mottled with  
clouds of apple-green passing into a  
bright grass-green in the middle.

The mark written underneath in  
cobalt-blue under a white glaze is Ta  
Ch'ing K'ang hsi nien chih, "Made  
in the reign of K'ang-hsi (1662-1722),  
of the Great Ch'ing [dynasty]."

The companion vase in the collec-  
tion, 8 inches high, of a similar form,  
and with the same mark underneath,  
has a "crushed-strawberry" ground,  
flecked with reddish-brown spots, and  
only slightly clouded, at one spot, with  
apple-green. The glaze has run down  
in thick drops and partially enfolded,  
leaving bare places, which have been  
filled in with tiny petals of gold lacquer.  
The upper rim is capped with a silver  
mount encircled with a floral pattern, and  
the neck is encircled by scrolled clouds  
and a gold dragon of Japanese design.

7

Let  $n$  and  $m$  be any two natural numbers

such that  $n < m$ . Then  $n$  is a natural number

less than  $m$ .

Let  $n$  and  $m$  be any two natural numbers

such that  $n < m$ . Then  $n$  is a natural number

less than  $m$ .

Let  $n$  and  $m$  be any two natural numbers

such that  $n < m$ . Then  $n$  is a natural number

less than  $m$ .

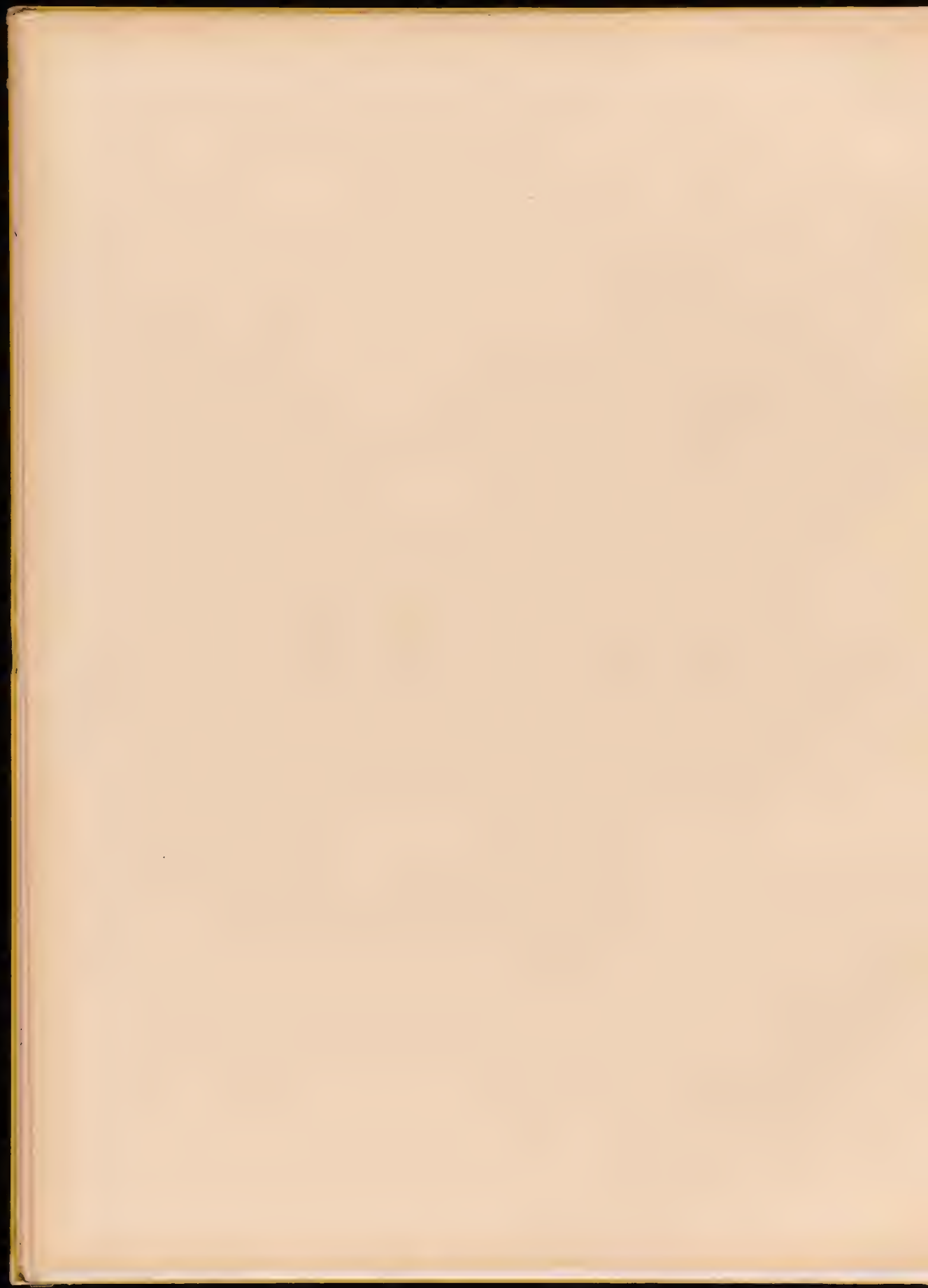
Let  $n$  and  $m$  be any two natural numbers

such that  $n < m$ . Then  $n$  is a natural number

less than  $m$ .

100





the Chinese think of it themselves. It must not be doubted that China has its antiquaries, whose predilections are all for ancient works. The Chinaman, indeed, has an innate respect for antiquity, although one finds defenders of modern art; but porcelain is not like ancient medals, which reveal the science of distant ages. Ancient porcelain may be ornamented with Chinese characters, but they mark no point in history, so that the curious could only find something in the style and in the colors which could lead them to prefer it to that of the present day. I believe that I heard it said, when I was in Europe, that porcelain, to have its full perfection, must have been buried for a long time in the ground; this is an absurdity which the Chinese ridicule. The history of King-tê-chên, speaking of the most beautiful porcelain of earlier times, says that it was so *recherché* that the furnace was hardly opened before the merchants were disputing for the first choice. There is no question here of having it buried.

"It is true that in digging up the ruins of old buildings, and especially in cleaning out old abandoned wells, fine pieces of porcelain are sometimes discovered, which have been hidden there in times of revolution; the porcelain is beautiful, because at such times they would only think of hiding what was precious, in order to recover it when the troubles were over. It is esteemed not because it has gained from the moist earth some new beauty, but because its ancient beauty has been preserved, and that alone has its price in China, where they give large sums for the smallest utensils of the ordinary pottery that was used by the Emperors Yao and Shun, who reigned many centuries before the T'ang dynasty, during which porcelain began to be used by the emperors.

"The mandarin of King-tê-chên, who honors me with his friendship, makes to his patrons at the imperial court presents of old porcelain, which he has the talent of making himself. I mean that he has discovered the art of imitating ancient porcelain, or at least that of a medium antiquity; he employs at this work a number of artisans. The material of which these false *ku-fung*—that is, ancient counterfeits—are made is a yellowish clay, which is brought from a place not far from King-tê-chên, called Ma-an-shan (Saddle-back Hill). They are very thick; a plate of this kind which the mandarin gave me weighs as much as ten ordinary plates. There is nothing peculiar in the workmanship of this kind of porcelain, except that it is given a glaze prepared from a yellow rock, which is mixed with the ordinary glaze, the latter predominating; this mixture gives to the porcelain a sea-green color. After it has been baked it is immersed in a very strong bouillon made of fowls and other meat; it is stewed in this a while, and is afterward put into the most filthy sewer that can be found, where it is left a month or more. When it comes out of this sewer it passes for being three or four centuries old, or at least for a specimen of the preceding dynasty of the Ming, when porcelain of this color and thickness was highly esteemed at court. These false antiques are also similar to the genuine things, in that they do not ring when struck, and emit no humming vibrations when held close to the ear.

"They have brought to me from the *débris* of a large shop a little plate which I value much more than the finest porcelain of a thousand years ago. There is painted on the bottom of this plate a crucifix between the Holy Virgin and St. John; they told me that they used formerly to export such porcelain to Japan, but that they had made none of it since sixteen or seventeen years ago. Apparently the Christians of Japan availed themselves of this industry during the persecutions, to have images of our sacred mysteries; the porcelain, mixed in the cases with the rest, might escape the search of the enemies of religion; the pious artifice would have been discovered later and rendered of no avail by a stricter search, and this is why, no doubt, they have left off making things of the kind at King-tê-chên."



FIG. 248.—K'ang-hsi Blue and White, a Teacup with carved open-work sides, mounted on a rice-bowl with pierced outer casing.



Two of the colors especially characteristic of the *Nien Yao*, or "Nien Porcelain," of this epoch are the *clair-de-lune*, or *yueh-pai*, and the bright *soufflé* copper-red. A specimen of the former is given in Plate LI (b); and the color of the new reign is the same, although the fabric of the porcelain is generally more delicate and the form more studied. The latter occurs in a rare combination with painted decoration in the charming little vase of baluster shape seen in Fig. 250, which deserves a word of description:

*Nien Yao Vase*, exhibiting the characteristic monochrome glaze of bright ruby-red tint and stippled surface. The *soufflé* glaze is applied over the whole surface, with the exception of a panel of irregular outline reserved on one side of the vase, where it is shaded off so that the red fades gradually into a nearly white ground. Within the panel there is painted, over the glaze, the picture of Tung Fang So, a Taoist divinity, in flowing robes, speeding across the clouds with a branch of peaches, the sacred fruit of longevity, on his shoulder. This is lightly etched in sepia and touched with gold, with the addition of a few strokes of pale overglaze cobalt-blue and *rouge d'or* of the *Yung-ch'eng* period. The foot of the vase is encircled by an ornamental scroll, nearly obliterated, painted over the ruby ground in black and gold. There is no mark underneath.

The *Nien* just referred to is, as the reader will recall, *Nien Hsi-yao*, an official of the *Nei Wu Fu*, or Imperial Household, who was appointed in the beginning of the reign of *Yung-ch'eng*, commissioner of customs at *Huai-an-fu*, with control over the river dues of the three provinces of *Kiangsu*, *Kiangsi*, and *Anhui*, and the superintendency of the imperial porcelain manufactory at *Ching-t'ê-chên*, for which he was also required to provide the necessary funds out of the customs dues. He held the post till the first year of the reign of *Ch'ien-lung*, when he was promoted, and replaced in the commissionership by *T'ang Ying*. He was consequently director of the porcelain works during the whole of the reign of *Yung-ch'eng*, and some of the peculiar productions of the period are still commonly known as *Nien Yao*, after him. He seems to have made periodical tours of inspection to *Ching-t'ê-chên*, during one of which he repaired the temple of the patron god, and erected a stone tablet in the courtyard to commemorate the fact. The inscription on this monument, which still stands there, records his official visit to the place in the fifth year of the reign of *Yung-ch'eng* (1727), and his orders that the porcelain made for the use of the emperor should be sent by boat twice every month to be inspected by him at *Huai-an-fu*, and that he would forward it on to the palace at *Peking*. We have a long list of the decorative designs and colors of the imperial porcelain made under his inspection, which is derived from official sources, and which is given in full detail in the next chapter. It supplies a fund of exact information, and is, on that account, of the greatest interest.

According to the *Ching-t'ê-chên T'ao lu*, "the vases made at this time included very many of soft eggshell color and well-rounded form, the glaze of which shone with the luster of pure silver. Some were decorated in blue and white, others in colors, and the various processes of painting, engraving, modeling under the glaze, and carving in pierced work, were all practiced in turn. The reproduction of ancient wares and the invention of novelties were undertaken in the imperial factory under his (*Nien*'s) direction."

The rounded form referred to in this extract is exhibited in the oval, melon-shaped vase of six-lobed outline in Fig. 251, which is coated with a silvery-white glaze, very finely crackled (*truite*) with a close reticulation of dark lines, so as to give a general gray effect; and in the white vase of the period in Fig. 252, the neck of which is encircled with the form of a coiling dragon modeled in openwork relief and enameled in *rouge d'or* of crimson tint, the rest of the surface being pure white, except for an occasional single peach-blossom touched in delicate



FIG. 251. — Six-lobed Melon-shaped Vase with a white glaze minutely crackled (*truite*), with a close network of dark lines, giving a gray effect.

colors near the foot and on the shoulder of the rippled surface of the vase, which was once marked underneath, but has had the inscription purposely ground away.\*

The good form and perfect technique of the period are well shown in two other illustrations. The first is a large baluster vase (*mei-p'ing*), Fig. 253, with gracefully rounded outlines, which is artistically decorated in brilliant enamel colors with fruits and flowers, the branches springing from below on one side and spreading upward in all directions upon the vase, so as to cover it with large pomegranates and peaches and bunches of yellow dragon's eye (*Nephelium longanum*) fruit, mingled with sprays of scarlet pomegranate-flowers and pink peach-blossom. The mark underneath, penciled in underglaze blue within a double ring, is *Ta Ch'ing Yung ch'eng nien chih*, "Made in the reign of *Yung-ch'eng*, of the great *Ch'ing* [dynasty]."

The other vase (Fig. 257), though unmarked, is a typical piece of the period, in form, style of decoration, and coloring. The peculiarly tall, slender form springing from a spreading foot seems to have been introduced at this time. The scene depicted on the vase is the appearance of the Taoist goddess Hsi Wang Mu coming across the sea, borne upon a floating lotus-petal. The base of the vase is surrounded by scrolled and crested green waves, from which green and blue rocks rise in the background, and a temple with veranda and curling eaves—the abode of the divinity—is seen in the midst of the sea, with a gigantic stork perched on the roof. From a rock behind the temple springs a sacred peach-tree laden with scarlet and pink fruit, the branches mingled with rosy clouds floating across the shoulder of the vase, illuminated by the vermilion disk of the sun. A second stork is flying back to the temple, as the aerial messenger of the goddess, carrying in its beak two scrolls tied by a red band. The frail craft, a scarlet lotus-petal, floating on the sea in the foreground, contains two female figures. The goddess is sitting upon a rustic seat in the stern, dressed in conventional style in long robes and floating scarf with a short cloak of lotus-leaves thrown across her shoulders, and holds a branch of sacred fungus (*ling-chih*). The standing figure in front is her attendant, clad in a similar costume with a deep collar of fig-leaves, holding a rosy peach fringed with green leaves, and having a basket by her side full of flowers and Buddha's-hand citrons.

FIG. 252.—Yung-ch'eng Vase, with a ground of purest white, sprinkled with a few peach-blossoms painted in delicate colors, and having a dragon winding round the neck tinted in *rouge fur*.

Fig. 56 shows an example of "slip" decoration in partial relief, painted in underglaze cobalt-blue, as well as in the enamel colors, coral-red, yellow, greens of different shade, and black. It has inscribed underneath the usual seal-mark penciled in underglaze blue of the reign of *Yung-ch'eng*. It is a brush cylinder (*pi-t'ung*), of wide low form with swelling mouth, decorated with an appropriate motive, *M'eng Pi Sh'eng Hua*—i. e., "The Pencil Blossoming in Dreams." On the right a young man in scholarly dress is reclining asleep upon a couch; his figure, and the rocks and palms which rise in the background, are modeled in salient relief. From the top of his head proceeds a scroll which unrolls to show another scene, in which the same figure is seated at a table, with ink upon the pallet and a brush in his hand, about to dash down upon paper the poem evolved in dreamland, which he had vainly tried to compose during waking hours. The title of the picture, which is given above, is a half stanza from a classical poet. The Chinese artist always presents a dream as an unrolled scroll proceeding from the head of the dreamer in this quaint fashion.

Two little tea-jars are examples of modeling in relief and openwork carving, two distinct processes of work which distinguish some of the largest and most important vases of the time.

\* The mark is not infrequently obliterated in China on the lapidary's polishing wheel, and some of the finest pieces of Chinese porcelain are found to have been thus defaced. Such pieces have usually been stolen from the imperial palace by some of the eunuchs, or from some important collection by the servants in charge and treated in this way to avoid detection.

PLATE LIII

EGGSHELL PINK VASE

**LOWER VASE** (Hua Ping), 9 inches high, of egg-shell thinnest, incised with a soft monochrome glaze of pink color, belonging to the Yung-ch'ing (1722-35) or early Ch'ien lang (1736-95) period.

This beautiful and rare tint is the same as that with which the backs of some of the delicate egg-shell dishes of the time are enameled. It is a variety of the rose d'or, being derived from gold; different shades of pink were produced by combining the "purple of Cassini," which gives a pure crimson tint, with graduated doses of white. The pink, illustrated here, is called hai t'ang hung, or "Pyrus japonica red," by the Chinese, from its resemblance to the petals of that flower; the deeper crimson of the "ruby-backed" dishes, one of which is illustrated in Plate X, they call yen-chih hung, or "rouge-red."



1. The first of these is the  
 fact that the word "and"

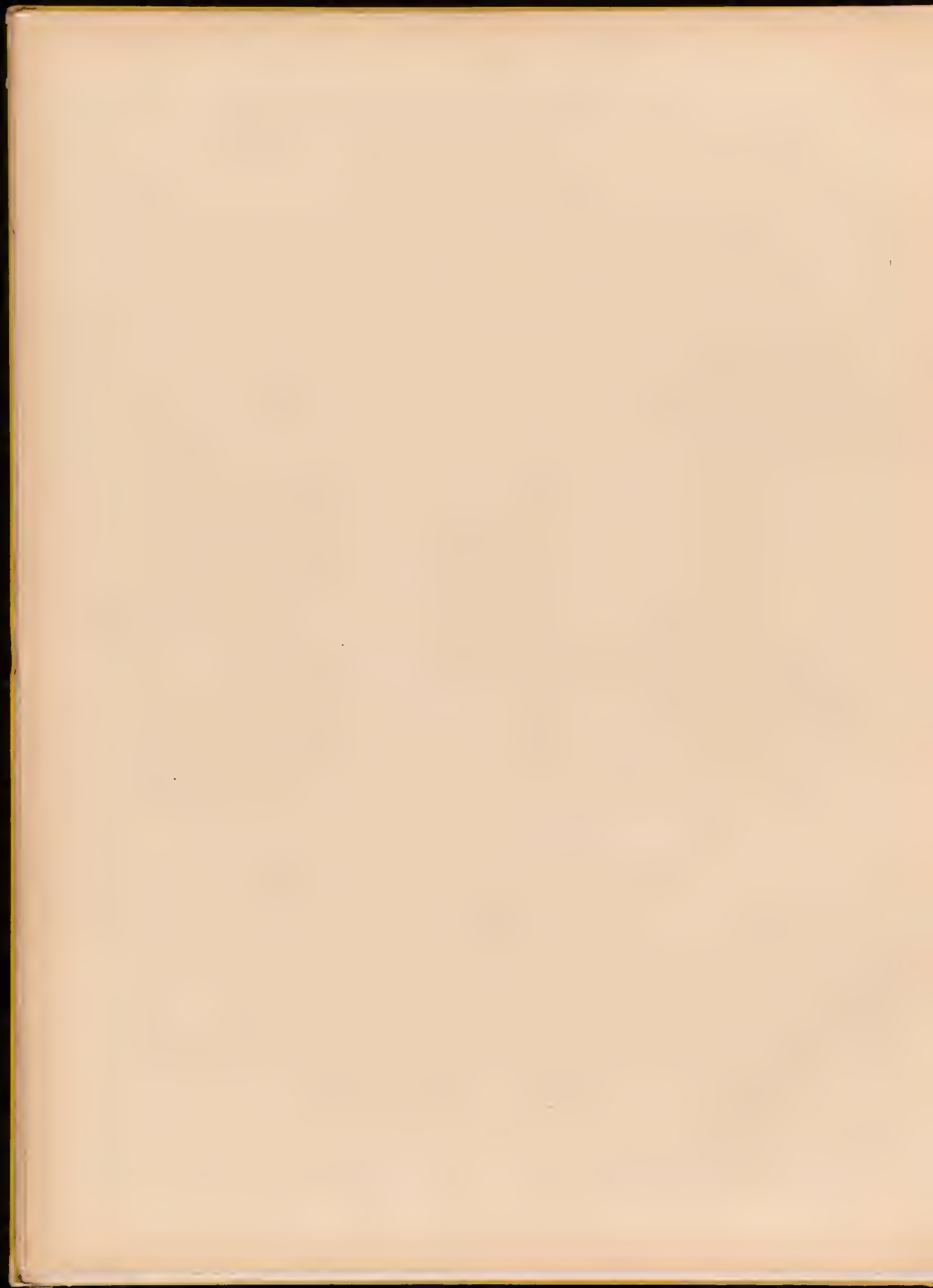
(which, when it is used, is  
 not only a conjunction, but  
 also a particle, and is  
 used in a variety of ways)

and the second is the

fact that the word "and"

is used in a variety of ways  
 and is not only a conjunction,  
 but also a particle, and is  
 used in a variety of ways





That shown in Fig. 254 has a ring of lotus plants projecting in salient relief round the base, and another lotus encircling the top of the cover. It is painted in enamel colors with gilding, with a temple hung with gold bells rising in the midst of the sea; with swallows flying in the air, and with a border of gilded diapers encircling the shoulder alternating with wavy scrolls painted in black. The other little jar of similar form (Fig. 255), which has the foot surrounded by a pierced openwork scroll, is decorated with lotus-leaf-shaped panels containing sprays of peonies, displayed upon a spiral black ground, sprinkled with blue bamboo-leaves and white plum-blossoms.

The saucer-shaped dish in Fig. 249 (*a*) is included here, because it happens to have the mark of the reign penciled underneath in blue, eggshell plates of the period

being usually not marked. It is decorated inside in enamel colors, with a cissus, a spray of roses, stems of *Polyporus* fungus of Taoist symbolic design, which was first introduced simply for ornamentation, which was first introduced simply for ornamentation. It is a Chinese that every decorator have some recondite meaning introduced simply for ornamentation. It is a Chinese that every decorator have some recondite meaning introduced simply for ornamentation.

The Emperor Yung-Chêng Chinese to have been a ramic art, and some of the distinguished the latter part due directly to the interest apparent, as described by letters. During his reign

to Ching-tê-chên from the imperial collections at Peking a number of antique objects and specimens of ancient glazes to be reproduced in the imperial manufactory. The reproductions are described to have been often more finished and perfect than the originals, and they figure as such in many a private collection, both in China and abroad. Their variety and character will be enumerated in the next chapter, which is taken directly from the official records of the time.

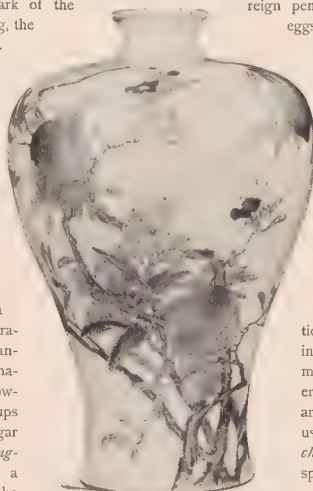


FIG. 253.—Baluster Vase richly decorated in enamel colors, with fruits and flowers; mark, Yung-chêng

It is decorated inside in flowering bulb of narcissus and two branching lucidus—the variegated sacred lore. A favor-upon imperial porcelain introduced in this upon the Chien-lung 249 (*b*), which is painted with peaches bearing fruit, that wind over to decorate the interior, symbols of the common notion of the notion for imperial use must

ing of this kind and not be ment, like a landscape or a ers that are thought sufficient and bowls that are in-use.

chêng is considered by the special patron of the ce-more elaborate work that of the preceding reign was he took in it when heir-Père d'Entrecolles in his he continued to send down



FIG. 254.—Jar with a girdle of lotus plants in relief; decorated with enamel colors and gold

### CHAPTER XIII.

#### OFFICIAL LIST OF THE DESIGNS AND COLORS PRODUCED AT THE IMPERIAL MANUFACTORY IN THE REIGN OF YUNG-CH'ENG.

THIS list was first published in the *Chuang hsi-fung-chih*, the General Description of the Province of Kiangsi, in which Ch'ing-tê-chên, with its Imperial Porcelain Manufactory, is situated. I am translating it from the latest edition of this voluminous compilation (book xciii, folio 11-13). It is given there under the heading, "An Old List of the Different Colors of the Round and Square Porcelain, and of the Vases ordered to be made for the Emperor." The following explanatory note is added by the editors below the title: "With respectful reference to the productions of the imperial porcelain manufactory, among the ornamental vases and jars, the vessels for sacrificial wine and for meat offerings, the dishes, bowls, cups, and platters for ordinary use, ordered to be sent in annual rotation to the palace, there are so many different kind of things, that it would be impossible to attempt to enumerate them all. We will extract from Hsieh's Description (of the province) a list of fifty-seven kinds given there, in order to give a general idea of the porcelain made at the time."

The first edition of the *Chiang-hsi-fung-chih*, we are told in the introduction, was published in the *Ming* dynasty, in the reign of *Chia-ch'ing* (1522-66). Two revised editions were issued during the reign of *K'ang-hsi* (1662-1722), and another in the reign of *Yung-ch'eng*, which was published in the cyclical year *jên-tai* (1732). This last edition is the one referred to above. It was compiled by Hsieh Min, who was governor of the province of Kiangsi from 1729 to 1732. The list, therefore, can not be later than 1732. It was prepared specially for the official work, and affords an invaluable description of the porcelain made in the reign of *Yung-ch'eng*, under the superintendence of the director, Nien Hsi-yao, referred to in the last chapter. This is altogether confirmed by the internal evidence of the list itself, as many of the things described are characteristic productions of his time, and are still known to Chinese collectors as *Nien Yao*.



FIG. 255.—Jar with open-work scrolls round the foot; decorated in enamel colors.



FIG. 256.—Sparsely Crackled White Fen-t'ing Vase of rare form, modeled with a whorl of palm-leaves encircling the shoulder, connected by ridges with eight foliations on the bulbous mouth.

This list, with some minor variations, is given by Julien (*loc. cit.*, livre vi, page 192), who quotes it from the annals of the city of Fou-liang, under the somewhat misleading title *Catalogue des émaux et des vases anciens qu'on imite à King-te-ichin*. His translation of the Chinese, too, is very inaccurate, probably because he was not familiar with the objects described. I venture to allude to this because his book is so universally accepted as the text-book on the subject; there is no space to notice all the discrepancies, and I will therefore pass on at once to the list:

PLATE LIV

PEACH BLOOM VASE

**F**LOWER VASE (Hsa P'ong), with the "peach bloom" glass of the K'ang-hsi Period (A. D. 1662-1722). The illustration, in the size of the original, shows the gracefully curved lines of the form and the perfect technique of the piece. The swelling lip is defined by a line of white, and two white rings in slight relief encircle the neck as it springs from the shoulder. The rest of the surface is covered with a rich glass of velvety opaqueness, exhibiting the beautiful play of colors which distinguishes the "peach bloom" or "crushed strawberry" vases.

The neck is coated inside with a glass of bright apple green tint, sprinkled with a few dark-red spots, and tipped at the edge with a ring of mottled "peach-bloom."

The "mark" underneath, Ta Ch'ing K'ang-hsi nien chih, "Made in the reign of K'ang-hsi, of the great Ch'ing [dynasty]," is beautifully written in underglaze cobalt blue, the six characters arranged in three columns.



THE HISTORY OF THE

REIGN OF

CHARLES THE FIRST

BY

JOHN BURNET

OF THE UNIVERSITY OF OXFORD

IN TWO VOLUMES

THE SECOND VOLUME

CONTAINING

THE HISTORY OF THE

REIGN OF

CHARLES THE FIRST

BY

JOHN BURNET

OF THE UNIVERSITY OF OXFORD

IN TWO VOLUMES

THE SECOND VOLUME

CONTAINING

THE HISTORY OF THE

REIGN OF

CHARLES THE FIRST

BY

JOHN BURNET

OF THE UNIVERSITY OF OXFORD

IN TWO VOLUMES

THE SECOND VOLUME

CONTAINING

THE HISTORY OF THE

REIGN OF

CHARLES THE FIRST

BY

JOHN BURNET

OF THE UNIVERSITY OF OXFORD

IN TWO VOLUMES

THE SECOND VOLUME

CONTAINING

THE HISTORY OF THE

REIGN OF

CHARLES THE FIRST

BY

JOHN BURNET

OF THE UNIVERSITY OF OXFORD

IN TWO VOLUMES

THE SECOND VOLUME

CONTAINING

THE HISTORY OF THE

REIGN OF

CHARLES THE FIRST

BY





"1. Glazes of the *Ta-kuan* period, with iron (-colored) paste.\* (鐵骨大觀釉). These are of three different colors: (1) pale blue, or *clair-de-lune* (*yueh pai*); (2) pale blue or green (*fên ch'ing*); (3) dark green or *gros vert* (*ta lit*)—all of which are copied from the colors of the glazes of specimens of the *Sung* dynasty sent from the imperial palace."

The specimens which were sent out to be copied must have been examples of the *Kuan Yao*, the "imperial ware" of the *Sung* dynasty, which was described in Chapter V as having been made at the capital of the time, the modern K'ai-feng-fu. It was not till long afterward that it came to be called *Ta-kuan Yao*, after the name of the period *Ta-kuan* (1107-1110), in which it was invented, to distinguish it from the "imperial ware" of more recent times.

"2. *Ko Yao* glazes, with iron (-colored) paste. (鐵骨哥釉)

"These are of two kinds—(1) rice-colored, (2) pale blue, or green (celadon), both copied from the colors of the glazes of ancient pieces sent from the imperial palace."

Reproductions of the ancient crackled ware of the *Sung* dynasty made at Liu-t'ien in Lung-ch'üan-hsien, the invention of which was attributed to the elder Chang, from which it derived its name of *Ko Yao*—i. e., "Elder Brother's Ware."

"3. Uncrackled *Ju* (-chou) glaze, with copper (-colored) paste. (銅骨無紋汝釉)

"Copied from the color of the glaze of two pieces of the *Sung* dynasty—a cat's food-basin (*mao shih p'ên*), and a mask-shaped dish (*jên mien hsi*)."

The traditional tint of the *Ju*-chou porcelain is sky-blue, and the reproduction of the old glaze forms the *yü kuo t'ien ch'ing*, "the blue of the sky after rain," of modern times. The peculiar shape of the second piece reminds one of the wine-cup (*jên mien pei*), molded in the form of a man's face, of *Sung* imperial ware, which was described in Chapter V. Such a cup would make a convenient dish for washing (*hsi*) pencil-brushes, for which purpose, from its uneven surface, it would be well adapted.

"4. *Ju* (-chou) glaze with fish-roe crackle of copper (-colored) paste. (銅骨魚子紋汝釉)

"Copied from the colors of the glaze of a piece of the *Sung* dynasty sent from the imperial palace."

"5. White *Ting* (-chou) glaze. (白定釉)

"Only one kind is copied, the *Fên Ting*; the other variety, the *T'u Ting*, is not imitated."

These two varieties of ancient porcelain have been already described and illustrated. The *Fên Ting*, which is composed of fine white material, is enameled with a soft-looking, ivory-white glaze, with a surface either plain or crackled, generally the latter, as in the gourd-shaped vase illustrated in Plate LXXXIX. The little vase in Fig. 256, with foliations molded in slight relief covered by a sparsely crackled glaze, is a piece attributed to this period, fashioned after an ancient model.

"6. *Chün* (-chou) glazes. (均釉)



FIG. 257—Tall, slender Vase painted in enamel colors of the *clair-de-lune*, with a picture of the Taoist divinity Hs. Wang Ma.

\* Julien's rendering the first four examples is *Exempt en fer*, *Exempt en cuivre*, and recent writers have twitted the Chinese, on his authority, for not being able to distinguish enameled iron and copper from porcelain. The last paragraph, again, he translates: "Ces trois sortes d'émaux avaient la couleur et le lustre des vases des *Song* appelés *Nei fa-long-shi*, c'est-à-dire vases fournis pour l'usage du palais (dans la période *K'ing-ta*, 1004-1007)." There is no allusion to this period in the original text.

"Five different colors have been copied from ancient specimens sent from the imperial palace, viz.:

- "(1) Rose crimson (*Mei-kuei Tz'ü*).
- "(2) Pyrus japonica pink (*Hai-t'ang Hung*).
- "(3) Aubergine purple (*Chieh-p'i Tz'ü*).
- "(4) Plum-colored blue (*Mei-tz'ü Ch'ing*).
- "(5) Mule's liver mingled with horse's lung (*Lo kan ma fei*).

"And besides, in addition to these, the four following varieties have been taken from new acquisitions:

- "(6) Dark purple (*Shên Tz'ü*).
- "(7) Rice-colored (*Mi-sê*).
- "(8) Sky-blue (*T'ien Lan*).
- "(9) Furnace-transmutations, or *flambés* (*Yao Pien*)."

This is the most complete list we possess of the colors that were produced at the Chün-chou potteries during the *Sung* dynasty, and the whole empire must have been ransacked in



FIG. 258.—Ovoid Vase with mottled clouds of brilliant *ung-de-houf* tones on one side, spreading into a background of translucent celadon tint, which invests the rest of the surface.

order to get together so many treasures to be copied. The colors, it should be noticed, are all those of the *grand feu*, produced by different combinations of oxide of copper and cobaltiferous oxide of manganese, transmuted by the flames, oxidizing or reducing according to circumstances, of the large furnace. The skill of the potters in this line at this particular period has never been rivaled, and their work often figures in collections among the genuine antiques, for the form as well as the color of the original seems generally to have been carefully reproduced. A striking example of a shaped bowl of antique form, exhibiting the "Pyrus japonica glaze"—a pink ground flecked with darker red—was illustrated in Fig. 126. This is marked *Yang-chêng* underneath, indicating that it was an avowed reproduction of this time. An original piece of the *Sung* dynasty is illustrated in colors in Plate XCIV. The names of the colors are generally sufficiently descriptive of the varied shades, but no two pieces of the time are exactly alike, and some of the most brilliant successes in the originals, as well as in the attempts at reproduction, must have often been due to mere hazard.

"7. Reproductions of the copper-red of *Hsüan-tê* porcelain. (仿宣窑

霽紅). Two varieties are included.

- "(1) The clear red (*Hsien Hung*).
- "(2) The ruby red (*Pao-shih Hung*)."

The bright red of ruby tint derived from copper was used in the reign of *Hsüan-tê* as the color of the sacrificial cups which were employed by the emperor in the worship of the sun. Hence the name of *chi hung*, which means "sacrificial red," when it is properly written. The character used above is a borrowed one of the same sound, which means "clear sky," and is properly used only for the next glaze. Other unauthorized characters are sometimes substituted by writers who are ignorant of the derivation of the term, the strangest of which is *chi hung*, "chicken-red," on which M. Grandidier seems to base his term *sang du poulet*.

"8. Reproduction of the deep blue of *Hsüan-tê* porcelain. (仿宣窑霽青).

"The color of this glaze is deep and somewhat reddish; it has an orange-peel texture and palm eyes."

The orange-peel texture refers to its undulatory surface; the "palm eyes" are due to the production of tiny bubbles in the glaze. The color is of purplish tint; it is generally crackled, and the saucer-dishes on which it often occurs are usually found marked underneath with the seal of *Hsüan-tê*, lightly impressed under the glaze.

"9. Reproductions of colored glazes of the Imperial Manufactory (仿廠官釉)

"These are of three kinds: (1) Eel-yellow (*Shan-yü Huang*). (2) Snake-skin green (*shê-pi L'ü*). (3) Variegated yellow (*Huang fan tien*)."

PLATE IV  
WINE POT LE ORATED  
IN COLORS

**W**INE POT (Chia Hu), of  
rough paste and  
antique style, enamelled with  
colors and touches of gold, of the K'ang  
hs. period (1663-1722). Of oblong  
form, with the corners rounding the  
sides, it has an upright arched handle  
which is painted with black lines on a  
yellow ground, to simulate basket-work.  
The decoration is in panels with the  
typical flowers of the seasons on the  
four sides: the plum of winter, with  
a bird perched in the branches, and an  
evergreen bamboo growing from the  
rock beneath; the tree-peony of spring,  
with butterflies flying round; the lotus  
of summer; and the chrysanthemum  
of autumn. The intervals are filled  
with bands of floral diaper, interrupted  
on the shoulder by two medallions con-  
taining sprays of peonies, and formal  
sprays of the same flowers are painted  
on the curved spout.

The foot is glazed white under-  
neath, with no mark attached.

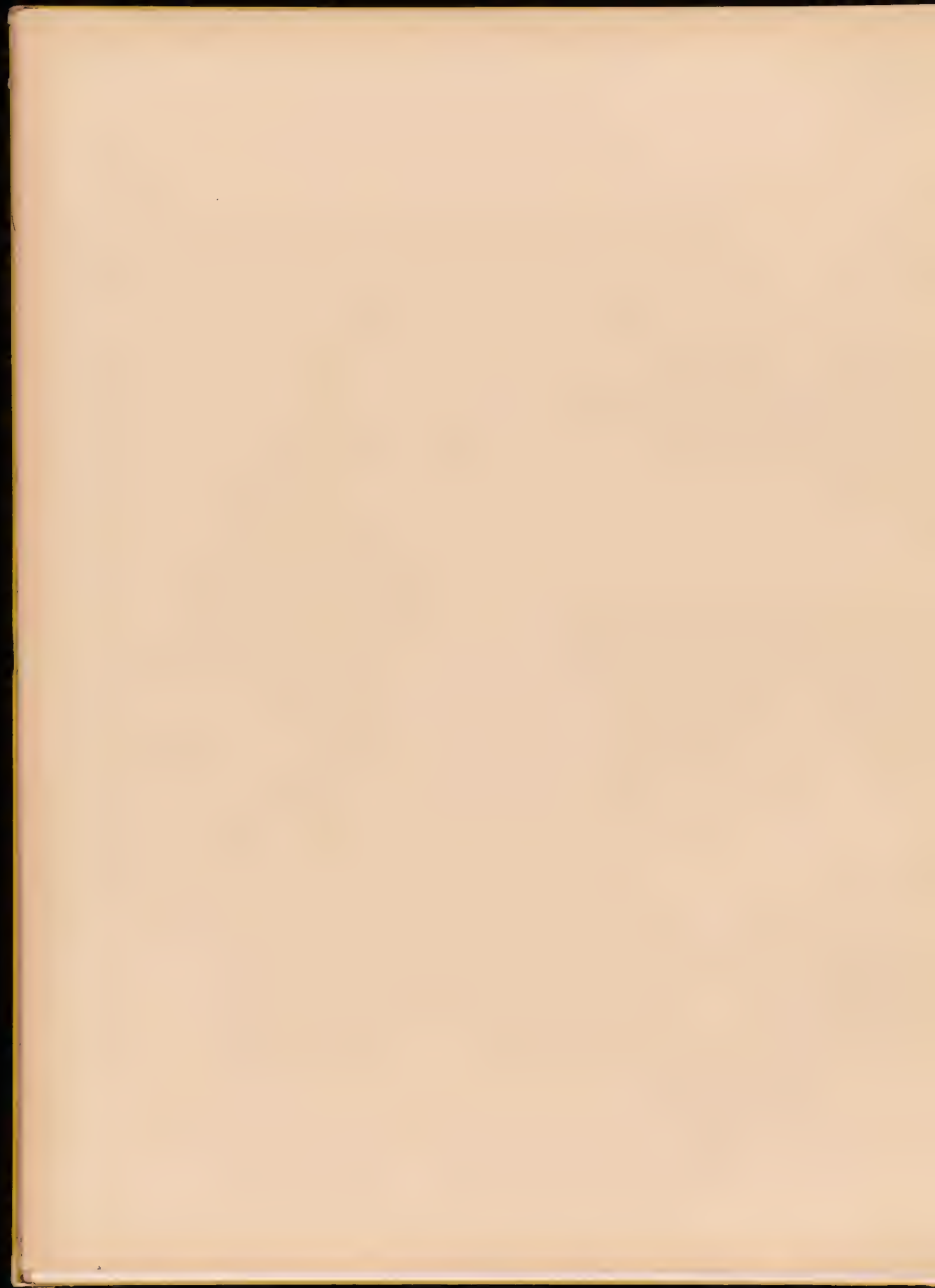


11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100



101  
102  
103  
104  
105  
106  
107  
108  
109  
110  
111  
112  
113  
114  
115  
116  
117  
118  
119  
120  
121  
122  
123  
124  
125  
126  
127  
128  
129  
130  
131  
132  
133  
134  
135  
136  
137  
138  
139  
140  
141  
142  
143  
144  
145  
146  
147  
148  
149  
150  
151  
152  
153  
154  
155  
156  
157  
158  
159  
160  
161  
162  
163  
164  
165  
166  
167  
168  
169  
170  
171  
172  
173  
174  
175  
176  
177  
178  
179  
180  
181  
182  
183  
184  
185  
186  
187  
188  
189  
190  
191  
192  
193  
194  
195  
196  
197  
198  
199  
200





These three glazes, which were invented in the preceding reign of K'ang-hsi by Ts'ang Ying-hsüan during his directorship, have been described in Chapter X.

"10. *Lung-ch'üan* glazes. (龍泉釉).

"These are of two shades, pale (*ch'ien*) and deep (*shên*)."

The *Lung-ch'üan* glaze of this time, which derives its name from the place where the old celadons of the *Sung* dynasty were made, is of a pronounced greenish tone, and it is often called *ton-ch'ing*, or "pea-green," for that reason. The color was produced by the addition of a little cobalt to the next glaze, which is the celadon proper. The *Lung-ch'üan* glaze is well represented in Plate LXXI, and in the ground color of the fish-bowl illustrated in Plate XXXVI.

"11. *Tung Ch'ing* glazes. (東青釉).

"These are of two shades, pale (*ch'ien*) and dark (*shên*)."

This color, the sea-green celadon, takes its name, which means "eastern green," from the fact that its celebrated prototype was made at K'ai-fêng-fu, the eastern capital of China in the early part of the *Sung* dynasty. Whatever may have been the materials of the old color, the recent reproductions owe their tint to the addition to the ordinary white glaze of a very small proportion of the ferruginous clay (*huang-t'u*), which produced the "dead-leaf" brown (*ts'ü-chün*). The typical celadon color is too well known to need description; it is, according to Salvétat, "un ton pale clair légèrement bleuâtre, analogue au ton de certains verres de gobeletterie." The peculiar clear translucency is difficult to reproduce on paper, but the shade of color is perfectly represented in Plates VII and XXXVIII; the last vase is one attributed to the *Yung-ch'eng* period.

"12. Reproduction of rice-colored glaze of the *Sung* dynasty. (仿米色宋釉).

"This has been taken from fragments of broken pottery discovered in the ruins of an ancient manufactory of the *Sung* dynasty at a place called Hsiang-hu, situated twenty *li* to the eastward of Ching-tê-chên, both the colored glaze and the form of which have been reproduced."

"13. Reproduction of pale-blue (or green) glaze of the *Sung* dynasty. (粉青色宋釉).

"The specimens copied here in form and color were obtained at the same time as the rice-colored pieces of the *Sung* dynasty just referred to."

"14. Reproduction of the oil-green glaze. (仿油綠釉).

"This was copied from an ancient piece of the furnace-transmutation (*yao pien*) class sent from the imperial palace, the color of which resembled moss-green jade (*pi yü*), having a brilliant ground variegated with mottled tints of antique rare beauty."

There is a small vase of the "peach-bloom" type illustrated in Plate L, which answers remarkably well to this description, being invested with a green glaze variegated with streaks and mottled clouds of deepest emerald, passing into olive as they run down across the field.

"15. The Chün (-chou) glaze of the muffle stove. (鑪均釉).

"The color of this is between that of the Canton pottery ware and that of the enamel of the Yi-hsing 'boccaro' stoneware,\* and it excels these in its markings and in the changing tints of its flowing drops."

This glaze is the "robin's egg" of the American collector, and no better name could be imagined for it. It has greenish-blue dappling and flecking on a reddish ground, the green being subordinate to the blue. The term "muffle" is added to distinguish it from the high-fired Chün-chou glazes which are described above and under No. 6, but in modern usage this is generally omitted, now that the other glazes are no longer prepared, so that the "robin's egg" is the "Chün yü" of the present day. The glaze is prepared, according to the *Ch'ing*-



FIG. 259. Vase of Coral-red *soufflé* ground, displaying a craquelé in translucent white relief etched under the glaze.

\* The references here are, doubtless, to the glazes of these two potteries described in the next two sections.

*tê-chên T'ao lu* (book iii, folio 12), by combining nitre, rock-crystal, and cobaltiferous manganese with the materials of the ordinary white glaze.

"16. Ou's glazes. (歐釉).

"These have been copied from productions of the ancient potter named Ou. There are two varieties made, one with red markings (*lung wên*), the other with blue markings (*lan wên*)."

This potter flourished in the *Ming* dynasty at Yi-hsing-hsien, near Shanghai, in the province of Kiangnan, where he made a red stoneware, the kind known to us from a Portuguese word as boccaro ware, which is still made there.

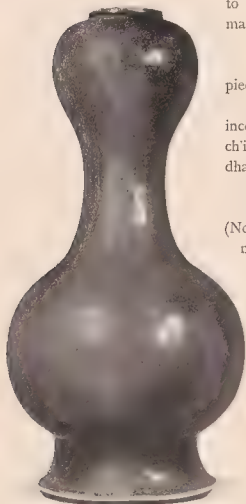


FIG. 260.—Large K'ang-hsi Vase with bulbous neck of powder blue, edged with white rim.

"17. Glaze flecked with blue. (青點釉).

"This has been copied from the colored glaze of an ancient piece of Kuang Yao sent from the imperial palace."

The "Kuang-Yao" is the brown stoneware made in the province of Kuangtung, at Kiang-yang-hsien, in the prefecture of Chao-ch'ing-fu. An example is illustrated in the statuette of Bodhi-dharma in Plate XLI.

"18. *Clair-de-lune* glaze. (月白釉).

"The color resembles very closely that of the Ta-kuan glaze (No. 1), but the paste of the porcelain is white. The glaze is not crackled. There are two shades—pale (*ch'ien*) and deep (*shên*)"

This is the pale sky-blue glaze derived from cobalt which is one of the choicest and most characteristic single colors of the period. It is of the monochrome tint of the vase of the preceding reign, which is illustrated in Plate LI.

"19. Copies of *Hsüan* (-48) porcelain decorated in ruby-red. (仿宣瓷寶燒).

"There are four varieties: (1) With three fishes, (2) with three fruits, (3) with three *ling-chih*, (4) with five bats, symbols of the five happinesses."

The designs were painted *sur biscuit* in copper-red, as described in Chapter VII. The name of *paò-shao*—i. e., "ruby-fired"—comes from an old tradition that powdered rubies were mixed with the glaze; amethystine quartz is really used in the present day, but this has nothing to do with the red color, which is a copper silicate.

"20. Copies of the Lung-ch'üan glaze decorated in ruby-red. (仿龍泉釉寶燒).

"This is a new process, introduced during the reigning dynasty. There are also the following four kinds of decoration: (1) With three fishes, (2) with three fruits, (3) with three *ling-chih*, (4) with five bats."

The color of the ground and the effect of the red decoration may be seen from a glance at the fish-bowl illustrated in Plate XXXVI, which is fashioned in the similitude of a lotus-leaf with the details of the plant picked out in copper-red on the ground of greenish celadon. Of the different decorations given above, the three fruits are most frequently seen on the outside of globular jars, for instance, which are ornamented with peaches, pomegranates, and Buddha's-hand citrons in the shape of three medallions. The outlines and leaves are occasionally touched in cobalt-blue, penciled under the glaze at the same time as the copper-red.

The small ovoid vase in Fig. 258 offers a charming example of the decorative effect of these two colors in combination. The irregular splash that covers one-third of its surface is of the deepest and most brilliantly scintillating ruby color in the middle, and shades off to crimson and pinkish mottled tints, as it gradually fades away into the celadon ground which invests the rest of the vase.

PLATE LYI.

LANG YAO BOTTLE

**B**OTTLE-SHAPED VASE  
(Ping), 26", inches high, of  
good form and finished tech-  
nique, enameled with the celebrated red  
glaze of the Lang Yao of the reign of  
K'ang-hsi (1662-1722). The sur-  
face of the glaze exhibits a superficial  
network of cracked lines, and its depth  
reflects the richly mottled tints of sang  
de-boeuf type, streaked with lighter  
shades below. The upper edge of the  
tall neck is defined by a rounded rim  
of white. The foot is apple-green un-  
derneath, not cracked, mottled with  
undefined rings of pale red.

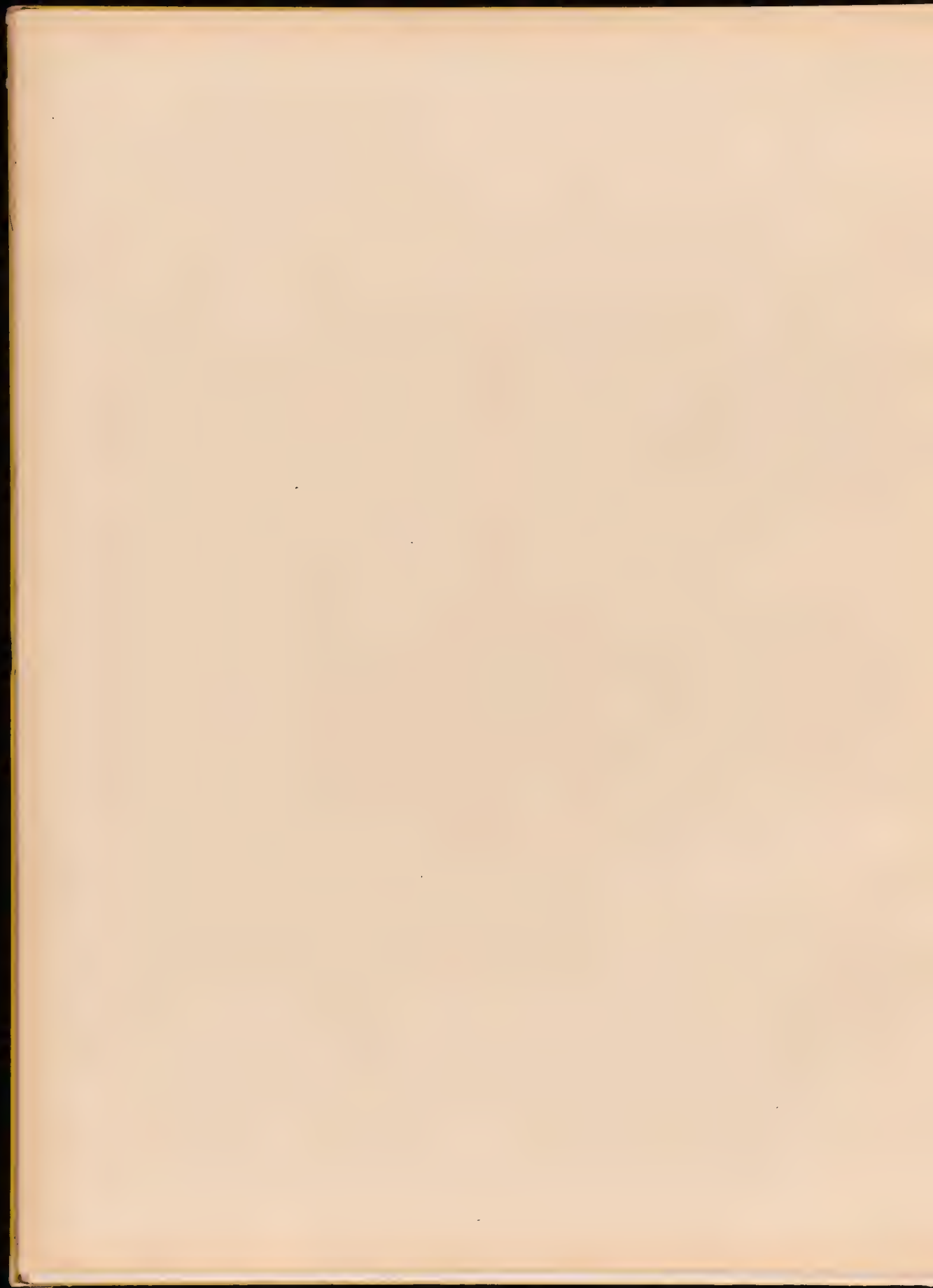


B  
11/10/17

11/10/17







"21. Turquoise glazes. (翡翠釉.)

"These are copied from three varieties sent from the imperial palace: (1) Plain turquoise (*su ts'ui*), (2) flecked with blue (*ch'ing tien*), (3) flecked with gold (*chin tien*)."

The turquoise glaze, produced by a combination of oxide of copper with a flux containing nitre, and applied *sur biscuit*, is finely crackled. It is called by the Chinese *fei-ts'ui*, from the similarity of its tint to that of the azure plumes of the kingfisher which are extensively used by them in jewelry. It is represented in nearly a hundred shapes in the collection, and some of its different shades may be seen reproduced in Plates XLIV, LXXXIV, XLV, and LXXXV. The second variety referred to above, where it is flecked with purple, is not rare, but the third variety, the gold-spotted turquoise glaze, is quite unfamiliar to me.



FIG. 261.—Graceful Vase with a floral decoration in colors, relieved by a finely crackled yellow ground.

"22. The *soufflé* red glaze. (吹紅釉.)"

The method of application of this glaze has been described by Père d'Entrecolles in the last chapter, and a specimen was exhibited there in Fig. 242, of the kind with a ruby-red ground derived from copper silicate. There is also a *soufflé* iron-red of coral tint, produced by sprinkling the prepared oxide upon the white glaze of porcelain that has been previously fired in the large furnace, and fixed by baking the piece a second time in the muffle stove. There is a charming example of this before us in Fig. 259; a vase with a four-clawed dragon in pursuit of the jewel worked in relief in the paste, finished with the graving tool, and reserved under the translucent white glaze, while the rest of the surface is covered with a coral-red of soft tone, shading off into paler tints as it merges into the irregular edge of the dragon medallion. The stippled texture, displaying an infinity of minute mottled points, indicates its *soufflé* application.

"23. The *soufflé* blue glaze. (吹青釉.)"

This was also described in the last chapter. The *ch'ui-ch'ing* glaze, often called "powder-blue," is one of the chief triumphs of the Chinese potter, and shows at its best, perhaps, when left as a single color, neither penciled over with gold nor contrasted with bright enamel colors, as is often the case. Nothing could be more magnificent than the vase, eighteen inches high, illustrated in Fig. 260, in its brilliant blue coat of intense mazarin tint, the ground flecked with darker spots, displaying, as it does, every shade of pure color flashing out from the depths of a translucent medium. The prepared cobalt material is blown upon the raw body of the piece, which is subsequently glazed and fired in the large furnace, so that it gradually penetrates the glaze, liquefied by the heat of the *grand feu*. The glaze must not be of a hard nature, we are told, like that of the white porcelain; it must be liquefied by having a larger proportion of chalk in its composition, otherwise the color will not penetrate.

"24. Copies of Yung-lo porcelain, including pieces of eggshell (*t'o-t'ai*), of plain white (*su-pai*), and with engraved (*chui*) and embossed (*kuang*) designs. (仿永樂窰脫胎素白錐拱等器皿.)

These varieties are all well known to collectors, but very many of the pieces that figure in collections as genuine relics of early *Ming* date are copies, with the original designs and marks carefully reproduced, that came from the workshops of the period we are discussing. They are too perfect in technical finish, and never show the irregularity of shape and pitting of glaze that so frequently mark the ancient porcelain. The quality, in short, is exactly that of the decorated eggshell plates of the same date, and I have heard it argued from this fact that the latter must really date from the reign of Yung-lo, even if they were painted in subsequent times; they are really contemporary; it is only that the white eggshell is antedated. For a genuine early specimen of this class, refer to Fig. 70.



FIG. 262. Teapot of "Armorial China," decorated in enamel colors, with gilding of the Yung ch'eng or early Ch'ien lung period.

"25. Copies of porcelain of the reigns of *Wan-li*, and of *Chêng-tê*, decorated in the five colors. (仿萬歷正德窰五彩器皿)"

The five-colored decoration of the *Wan-li* period was executed in overglaze enamel colors, with the exception of the cobalt-blue, which was previously painted on the raw body before glazing. It is illustrated in Figs. 167 and 106. That of the reign of *Chêng-tê*, of more archaic style, was in colored glazes, which were laid upon the unbaked paste, worked in outline and chiseled, and which were fired in the *grand feu*. A reproduction of this class with the *Chêng-tê* mark impressed underneath the vase, which may date from the time we are considering, has been given in Fig. 162.

"26. Copies of porcelain of the reign of *Ch'ing-hua*, decorated in the five colors. (仿成化窰五彩器皿)." This has been discussed at sufficient length in Chapter VII.

"27. Copies of porcelain of the reign of *Hsüan-tê*, with painted designs on a yellow ground. (仿宣花黃地草器皿)"

This refers probably to pieces painted in colored glazes, with the designs relieved by an enameled yellow ground. I have seen bowls and saucer-dishes of the kind, decorated with



FIG. 263.—Twin Vase of the Ch'ien-lung period, decorated with panel pictures, painted in European style, from European originals.

peonies—the flowers violet and the leaves green—surrounded by a yellow ground, which had the mark of *Hsüan-tê* underneath. The finely modeled vase illustrated in Fig. 261, although it has no mark, is an example of a similar technique, which is to be attributed probably to this reign of *Yung-ch'eng*. It is decorated with peonies, chrysanthemums, and daisies, growing from rocks, with a butterfly or two flying in the intervals. The details of the decoration are all lightly engraved in the paste. The colors are green and purple, with a few touches of white, displayed upon a background of pure bright yellow, which is minutely cracked throughout. The foot is coated with the same *truite* yellow glaze underneath, and has no mark attached.

"28. The *cloisonné* blue glaze. (法青釉)"

"The combination of this glaze is founded upon recent experiments. Compared with the purplish-blue glaze (described under No. 8), it is deeper and more brilliant, and it has no orange-peel markings or minute bubbles (palm-spots)."

The character *fa* (the first of the three) is used here as a contraction for *fa lang*, "*cloisonné* enamel." The color referred to is that generally known by the name of *pao-shih lan*, or "sapphire-blue," which was introduced about this time, and which is illustrated in Plate XXIX.

"29. Copies of European figures and models after life executed with carving and embossed work. (仿西洋雕鏤像生器皿)"

"Sets of the five sacrificial utensils (*wu kung*), dishes (*pan*), plates (*tiên*), vases (*ping*), and boxes (*ho*), and the like, are also decorated with colored pictures painted in the European style."

We saw, in the last chapter, in Père d'Entrecolles's letters, that porcelain was made at Ch'ing-tê-chên for export to Europe, and painted with foreign designs brought there by Cantonese traders; and he also tells us that the mandarin in charge asked him to procure new designs from Europe, so that he might make more novelties for presentation at court. Here we learn that such things were made at the imperial manufactory and sent direct to the emperor at Peking.

On the other hand, many of the sovereigns of Europe sent to China about this time for services of porcelain, to be decorated for them and painted with their coats of arms. Most collections of Oriental porcelain contain specimens of "armorial china," the majority of it dating from this reign and the succeeding one; some from the earlier reign of *K'ang-hsi*. A selection has been published with the pieces illustrated in colors by W. Griggs, London,\* and the date

\* *Illustrations of Armorial China*. Privately printed. One hundred copies only. 1887.



